# Buddhist Thought and Applied Psychological Research

## Transcending the boundaries

*Edited by*
D. K. Nauriyal, Michael S. Drummond and Y. B. Lal

Routledge Critical Studies in Buddhism

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# BUDDHIST THOUGHT AND APPLIED PSYCHOLOGICAL RESEARCH

The interface between Buddhist Studies and the uses of Buddhist principles and practices in psychotherapy and consciousness studies has attracted a growing interest from scholars and researchers of both Buddhism and psychology. This book presents a collection of articles by leaders in these fields that typify the potential of Buddhist-informed social sciences in contemporary society, including new insights into the nature of human consciousness. It examines the origins and expressions of Buddhist thought, and how it is now being utilized by psychologists and social scientists. The basic tenets of Buddhism and contemporary Buddhist-based empirical research in the psychological sciences are explained. Further emphasis is placed on current trends in the areas of clinical and cognitive psychology and on the Mahayana Buddhist understanding of consciousness with reference to certain developments in Consciousness Studies and Physics. All of the works in this volume demonstrate how Buddhist principles can be used to develop a deeper understanding of the human condition and behaviours that lead to a balanced and fulfilling life.

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TO MY LATE GRANDPARENTS
SH. M. R. NAURIYAL AND SMT. PAVITRA NAURIYAL
DKN

TO SVETLANA
MSD

TO MY FAMILY
YBL

# CONTENTS

## *Section two*

# ABOUT THE EDITORS

**D. K. Nauriyal, PhD** is a Professor of Economics at the Indian Institute of Technology Roorkee, in Roorkee, India. He has developed a learned interest in psychology and Buddhist meditation and holds that the evolution of mindfulness-based interventions in psychotherapy has great promise for Indian society. Having come from the Garhwal region of the Himalayas, he has kept a keen eye on Tibet issues, the conditions of its people in India and the teachings of HH the fourteenth Dalai Lama, with whom he first came in contact in 2000.

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# HH DALAI LAMA'S FOREWORD

In our time, science has been an extraordinary tool for understanding the material world, but it does not seem advanced enough regarding internal experiences. On the other hand, Buddhism reflects a deep investigation into the workings of the mind. Over the centuries many people have carried out what we might call experiments in this field and have had significant, even extraordinary, experiences as a result of the spiritual or meditative practices they have undertaken based on their understanding. Therefore, I firmly believe that there is great scope for the discussion and joint study between scientists and Buddhist scholars that will lead to the expansion of human knowledge.

If we are to lead meaningful, happy lives, material development is certainly necessary. But this can become dangerous if at the same time we neglect our inner development. For that reason I have also been encouraging scientists to examine advanced Tibetan spiritual practitioners, to see what effects of their spiritual practice might be of benefit to others in a more general context. The important point being to increase our understanding of the world of the mind, of consciousness and of our emotions.

Experiments have already been carried out that show some practitioners of meditation can achieve a state of inner peace, even when facing disturbing circumstances. The results show such people to be happier, less susceptible to destructive emotions and more attuned to the feelings of others. So, spirituality is very important, but if it has no effect on our material conduct it is not complete. At the same time, science, technology and material development cannot solve all our problems. We need to combine our material development with the inner development of such human values as compassion, tolerance, forgiveness, confidence and inner strength.

These days scientists, psychotherapists in particular, are taking a fresh interest in meditative and ethical techniques and are prepared to reappraise their attitudes

towards the relevance of spiritual development in order to achieve a more complete view of life and the world. There is also a growing interest among the scientific community in Buddhist philosophical thought, with its emphasis on the need to follow reason and fact. The editors of this volume, Dr D. K. Nauriyal, Mr Michael S. Drummond and Dr Y. B. Lal, have brought together various contributions from the disciplines of Buddhist studies, philosophy and psychology to reveal the connecting link, the relation between these areas of experience. As a result of such efforts, I am optimistic that over the next few decades there will be a great change in our world view from both the material and the spiritual perspectives. I am sure that if readers approach the materials presented here with an open heart and an open mind, they will find much to inspire them to contribute to this ongoing dialogue.



March 3, 2005

# PREFACE

> When it rains and shines, it's just a state of mind . . . rain, I don't mind, shine, the weather's fine.
>
> (Adapted from Lennon and McCartney's 'Rain')

From 'the beginning', human-kind has been fascinated with their experience of the mysteries of the world, both within and without. Early meditative and shamanistic practices then grew into religiosity which was the systematic mid-wife to philosophy. In the West, this epistemological imperative has since metamorphosized into various scientific tributaries, resulting in the disavowal of their mystical heritage. This then led to socio-cultural tensions and also new philosophies seeking to explain these changes. But along with these new worldviews, such as postmodernism, Buddhist principles and practices have also penetrated the Western cultural fabric. Some of the best scientific minds have placed themselves face-to-face with the central methods of Buddhism, investigating and utilizing what are essentially scientifically oriented processes, in order to approach the ancient questions of consciousness and human psychological suffering that intractably continue to confound.

Both psychologists and Buddhist scholars have concluded, through personal experience and empirical evidence, that Buddhist mindfulness practices have an unusual ability to cut through the tenaciousness of mental afflictions. The goal of this book is to explore this engagement of Buddhist mindfulness principles and practices by contemporary scholars from the areas of Buddhist studies (an academic pursuit of the analysis of Buddhist texts), philosophy and psychotherapy. Particular emphasis has been placed on the examination of the class of psychotherapies termed 'mindfulness-based interventions' as these therapies have been systematically integrated with Buddhist mindfulness principles and practices. Moreover, there is a growing body of empirical studies pointing to their efficacy in a wide variety of settings. This all has necessitated the transcendence of existing boundaries through interdisciplinary and cross-cultural inquiries.

Specifically, this volume is concerned with the interdisciplinary nature of the integration of Buddhist mindfulness principles and practices, by applied psychologists,

into systems of psychotherapy. The term 'interdisciplinary' is used here because any theoretical framework offered to explain the 'hows' and the 'whys' of using Buddhist mindfulness techniques in psychotherapy often leads the psychologist to consider and analyse certain Buddhist tenets.[1] Since Buddhist studies specialists have long analysed and considered Buddhist tenets, there appears to be a natural bridge between these two groups of researchers.

As with any academic endeavour, the analysis of Buddhist texts, just referred to as 'Buddhist studies', has its own specific, textually based methodologies. The other side of the coin then is how Buddhist studies specialists, using these meticulously developed methodologies, understand these same principles and practices. In this way, juxtaposing chapters written by Buddhist studies scholars and applied psychologists demonstrates the broad context from which certain Buddhist tenets inform the mindfulness-based psychotherapies.

Such an interface is necessary because the overall corpus of the early discourses and later exegeses of Indian and Tibetan Buddhism (such as found in the Gelukpa school) show that there are many more important and related tenets in the same context from which mindfulness principles and practices are found. It would be evident to any Buddhist studies specialist who would care to look that there is a dearth of input from specialists trained in the academic analysis of Buddhist texts in the current state of the Buddhism–Science dialogue.[2] This indicates a need for a more formalized exchange between applied psychologists and university-trained specialists in Buddhist studies who are conversant in both the textual languages of Asian Buddhism and the academic methodologies of Western scholarship in the humanities.

## The use of language in Buddhist studies

It is well known that the mindfulness-based interventions have been substantially influenced by the Pāli Buddhist understanding of Vipassana meditation.[3] What then does the academic study of the Pāli texts have to tell us? First, let us briefly consider basic methodology in Pāli Buddhist studies. It has been and remains secularly, and also critically, oriented, even though it is not uncommon to find Pāli scholars practicing meditation.[4] This allows for sober analyses of the texts, and of how the Theravāda tradition in particular and the Buddhist tradition in general sees itself. This perspective has been highly influenced by past and present scholars who were and are associated with the 120-year-old Pāli Text Society and in turn they have considerably influenced the more recent endeavours by academically trained specialists to systematically analyse both Mahāyāna and Tibetan Buddhist texts.

As for the Pāli material, it can be readily seen in the efforts of these scholars to correctly translate and explain the Pāli tenets, especially as seen in the collections of discourses (*sutta piṭaka*) and discipline (*vinaya piṭaka*), that the use of language has been understood to be, until the present time, of paramount importance. This is where the methodologies of textual and historical analysis come in.

Research findings are explained in language that is used analytically with reference to common sense, logic, rigour and argument all in an attempt to accurately explain the Pāli tenets. This basic methodology recognizes that philosophical problems arise in analysing and interpreting these principles due to the ambiguities of language and therefore it is fundamentally concerned with keeping interpretations as close as possible to what the texts say with respect to common sense and logic; this in the individual discourses *vis-à-vis* the context of the overall corpus of discourses. But it also requires the scholar to investigate the discrepancies that are found when examining the texts.

Consequently, it does not matter whether Buddhist studies is correctly considered a discipline in its own right. Based on the methodological importance of language and literary methodologies of analysing ancient religious texts (which could truly be termed 'literary archeology') used by several generations of Buddhist studies scholars, these specialists have incrementally built up a critical mass of polished commentarial material. Through this painstaking academic endeavour of falsification and verification,[5] the current generation of secondary academic literature in English has been refined to the point that it is now supplying a very sophisticated commentary on what the Buddha taught as per the Pāli discourses.[6]

Similarly, a critical mass of research findings has built up in applied psychology's work on mindfulness-based interventions based on empirical research as to the efficacy of these 'hybrid' therapies. There is also theoretical work involved in articulating empirical conceptualizations of mindfulness. Hayes, for instance, in his article sees the mindfulness-based therapies as essentially scientific in their outlook and as such in need of 'a naturalistic, theoretically sound, and empirically useful conceptualization' rather than treating them simply as techniques. To what extent could a certain passage discussing mindfulness in an obscure Pāli sutta or Zen sūtra assist in such theoretical work? And for the Buddhist studies student or specialist, would this not supply an intriguing focus for an interdisciplinary research topic?

From a Buddhist studies view point, this all has important implications for the future generations of specialists. Importantly, it will give the student of Buddhist studies a first hand look at how one's academic training in Buddhist studies methodology can be used within the psychological and cognitive sciences wherein cutting edge medical technology and the methodology of first-person perspective are both in their investigative infancy in examining the effects of Buddhist meditation principles and practices. Hence in reflecting on the work of the applied psychologists, the Pāli textual claims that *satipaṭṭhāna* (the establishing of mindfulness) meditation practice gradually frees the individual from mental afflictions (*vineyya abhijjhādomanassa* cf. MN.1.55–63) opens the door for the Buddhist studies student or specialist to engage in any number of interdisciplinary, empirical research foci. This could also lead to a further investigation within Buddhist studies itself, with regard to related findings in psychology, as to the common threads that run through the various Buddhist meditation traditions.

## The structure of the book

The volume is divided into two parts, Part I, *An understanding of consciousness from traditional Buddhist philosophical perspectives* and Part II, *Mental afflictions: their arising and deconstruction*. In Part I, the editors have included articles on the nature of consciousness from a Buddhist philosophical perspective. Although this is primarily to provide the background necessary for readers to more thoroughly understand the research presented in the first and second sections of Part II, it is also to cogently illustrate the relevancy of Buddhist studies-led interdisciplinary articles on consciousness. From this standpoint, the volume actually has a triangular interface, with each section (the Buddhist philosophical perspective, the Buddhist psychology perspective and the applied psychology perspective) partaking of each other's fields. Thus the articles on Buddhist philosophical perspectives are working with developments in consciousness studies, cognitive science and Western philosophy, which are related to matters in academic psychology, as well as the early Buddhist understanding of sense consciousness. The applied psychology chapters in the second section of Part II are dealing with Buddhist mindfulness principles and practices, which imply issues of consciousness including its manifestation as emotional memory and memory in general. Finally, the group of Buddhist studies articles in the first section of Part II supply the basic Buddhist tenets, of which consciousness provides the framework and from which the Buddhist philosophical and applied psychology perspectives take their cues.

At this point an overview of the nine chapters of philosophical material in Part I is in order. The lead chapter has been crafted by John Pickering who has adeptly articulated a philosophically based historical framework for the interdisciplinary efforts of the volume. This is done by examining how postmodernism has given rise to a methodological pluralism, showing as it does the philosophical difficulties in holding a sole theoretical structure as being able to 'completely explain what the universe is like or how the human condition fits into it'. Pickering's work clarifies for the reader, whether specialist or informed non-specialist, a framework for understanding how and why Buddhist studies, consciousness studies and applied psychology have an imperative to continue examining each other's fields of endeavour.

Coming after Pickering, William Ames introduces Nāgārjuna's *Mūlamadhyamakakārikā* (or MMK), the root text of the Mahāyāna Buddhist Madhyamaka school. This text, perhaps Nāgārjuna's most important, qualifies him as being considered as one of the central patriarchs of the Mahāyāna tradition. In examining this text, Ames examines the role of emptiness in attaining Nirvāṇa. He begins by negating Nirvāṇa as an inherently existing object to be attained by a real self. He proceeds to show how emptiness is not other than dependent origination and that direct experience of emptiness is required for Nirvāṇa. As such this is the spiritual significance of emptiness in the MMK. Ames' discussion of the MMK then supplies the reader with a foundation in the

Mahāyāna philosophical tradition upon which to consider the issues brought up in the following article concerning the later Mahāyāna understanding of the 'storehouse consciousness' (*ālaya-vijñāna*) tenet as stated by the Yogācāra school and later developed by the Tibetan Dzogchen school.

Following Ames is Chapter 3, co-authored by David Germano and William Waldron, which complements Ames' exposition of ultimate Emptiness insofar as it first examines the historical background to and evolution of the concept of *Ālaya-vijñāna* within early, Abhidharma and Yogācāra Buddhism and then outlines aspects of its further development in the Dzogchen philosophy of Longchenpa, the fourteenth century master of the Nyingma school of Tibetan Buddhism. Waldron and Germano, specialists in Yogācāra and Dzogchen, respectively, combine forces to elucidate this important but often obscure historical evolution. This work well illustrates how Buddhist traditions, like any living religion, continuously re-examine and reformulate their ideas in light of changing historical circumstances. Considering current interest in Dzogchen meditation in both Asia and the West, this article may also be helpful to Buddhism practitioners.

In alignment with Chapter 3 on *Ālaya-vijñāna* in Yogācāra and Dzogchen, Chapter 4 by Michael Sheehy offers further insights into the nature of awareness from a Tibetan Buddhist perspective. Here, we explore the semantic, contemplative and psychological differences between the mind of a buddha and the minds of non-buddhas. Through reading translated excerpts of a Tibetan Buddhist psychological text by the Third Karmapa Rangjung Dorje (1284–1339) entitled 'Ordinary Awareness and Pristine Awareness, A Treatise on the Distinction', along with commentaries, this essay examines how the 8 modalities of ordinary awareness interplay with the 5 types of pristine awareness. Discussing how the mind becomes trapped within the subject–object dynamic, and how the 8 modalities of ordinary awareness interrelate, Rangjung Dorje's elucidations serve as a support for contemplative practice. Taking both the Sheehy and the Germano–Waldron treatments of the *Ālaya-vijñāna* teachings, this volume, to the best of our knowledge, has the deepest and most varied treatment of *Ālaya-vijñāna* in print up to mid-2005. As such, this should serve as a primary source of reference material for psychologists and cognitive scientists interested in a closer examination of Buddhist views of consciousness.

Subsequent to Sheehy's exegesis is Guy Claxton's delightful philosophical exploration of the comprehensive functioning of the whole brain, and the operations it performs, such as the ordering of competing desires. This first interdisciplinary chapter of the volume asserts that certain aspects of awakening can be explained by examining the brain's normal operations. The brain's extreme responsiveness to external conditions has developed into a 'complicated, conflicting tangle of self-related concerns and when these are active, the brain almost literally ties itself in knots, trying to resolve the unresolvable'. When such extreme reactions are calmed, the qualities of enlightenment begin to arise.

The ensuing article then draws the reader to return to issues of the *Ālaya-vijñāna* as understood by the Dzogchen view of consciousness. Written by

Alan Wallace, this chapter is the volume's second interdisciplinary endeavour that bridges consciousness studies and Buddhist studies *vis-à-vis* his artful intersection of how Dzogchen understands consciousness, and theoretical developments in physics, that in fact have implications for consciousness research. In reflecting on the Dzogchen view of consciousness, Wallace compares the concept of relative and ultimate vacuum states of consciousness with the definitions of relative and absolute vacuum states of space presented in contemporary physics. He regards these Buddhist and scientific views as complementary – each has its own strengths and weaknesses. The article has a wealth of information on important issues concerning consciousness and space, while raising thought-provoking issues and questions.

Michel Bitbol then tackles a difficult subject in epistemology that relates Madhyamaka tenets, along with certain aspects of Kant's epistemological views. This article shows the flexibility of the Madhyamaka tenets in Western philosophical discourse. While defining the methodological approach in his chapter, Bitbol notes that the major similarity between the Kantian and Madhyamaka stances is the deconstruction of the tendencies towards reification in philosophy by showing the antinomies of reason. The dissimilarity lies in the purpose of such deconstruction. Kant sought a secure foundation for science and morals and used reason to construct knowledge. In contrast, Madhyamaka uses rational procedures in order to transcend them because they hinder moving from conceptuality to higher non-conceptual states of awakening. Bitbol explains how the interaction between the two systems could enrich both.

Chapter 8 by Flanagan also contributes to a foundational discussion of the relationship between Buddhist principles and Western philosophical assumptions by considering the concepts of virtue and happiness in Buddhist thought. The article focuses on the folk concepts of happiness and draws distinctions between them and Buddhist concepts of happiness. The chapter presciently analyses what often seem to be polar opposites with the view of offering scientists a framework on which happiness, à la Buddhist happiness, that is positive emotions, can be further researched. This is a cogent philosophical work that naturally flows between the interdisciplinary aspects of its investigation.

William Waldron returns in the next chapter with his own work exploring convergences between Indian Buddhist and selected scientific understandings of mind, focusing in particular on the conditions for the arising of cognitive awareness. Extrapolating from the necessary correlation between our cognitive faculties and its objects, both these traditions suggest that the world we experience is correlative with its various supporting conditions. Upon continued investigation, these conditions inexorably expand to include our bodies, minds, language and society. Moreover, in key respects these are also found to occur automatically and unconsciously, revealing further convergences between the scientific understandings of a 'cognitive unconscious' and the Yogācāra concept of *Ālaya-vijñāna*.

The final chapter (Chapter 10) of Part I is Victor Mansfield's fluent examination of Carl Jung's conceptions and misconceptions concerning the core ideas

given in the *Bardo Thödol* or the *Tibetan Book of the Dead*. Mansfield uses a personal instance of synchronicity to discuss similarities between Jungian and Tibetan Buddhist conceptualizations. Synchronicity as a topic of investigation is particularly informative since it has both philosophical and psychological connections to Buddhism.

## Part II

Part II is divided into two sections. The first deals with Buddhist studies articles and how the Buddhist texts understand the problem of mental afflictions and their eradication through mindfulness meditation. The second section addresses how applied psychology, here represented primarily by articles studying the effectiveness of the mindfulness-based psychotherapies, likewise comprehends the reality of mental afflictions and how to disempower them.

An examination of the Buddhist studies section will show that the first three chapters, by three well-grounded specialists, establish the textual basis of the efficacy of mindfulness meditation. Chapter 11 is written by Ven. Anālayo, who has examined the various ways in which the early discourses explain mindfulness, for example, the relation of memory to mindfulness and to the mental quality of breadth of mind, a state of mind that is 'broad, open and receptive'. Anālayo notes that the Pāli suttas, while not using the exact phrase of 'breadth of mind', deduces as much in that the discourses state that a 'narrow mind' is the result of not being mindful, while a developed habit of mindfulness results in a mind that is 'broad' up to 'boundless'.

Next is Andrew Olendzki who has written on how the Pāli suttas understand *anattā*, not-self, the companion teaching of the Buddha to his central teaching of mindfulness. The chapter has structured a philosophically based, practically oriented discussion of not-self in the Pāli discourses while relevantly framing it within the context of Buddhist teachings in the West; this by reflecting on demands made by the Buddhist teachings of not-self made on Western assumptions of selfhood and identity.

The philosophical aspects of the chapter include the overall discussion of how the Pāli material sees the self as an illusory, phenomenal structure and also specific points such as the linguistic issue of how the English language, as it is commonly used, operates with a reified self as the center of action. In consideration of the praxis side of the chapter, which the author has used to pragmatically anchor the philosophical discussion in the concerns of meditation practice, Olendzki's exegesis offers a cogent discussion, interspersed with interesting sutta quotes, of how grasping after the objects of experience conditions the impermanent arisings of the self. He offers various insights into this process and concisely examines how mindfulness can turn back this habit of grasping and 'self building'.

Finally, James Apple investigates how Tsong-kha-pa, the fifteenth century founder of the Gelukpa school (of Tibetan Buddhism, of which HH the fourteenth Dalai Lama is the current lineage holder), understood the arising and purification

of mental afflictions. Apple's exegesis is based on Tsong-kha-pa's *Great Treatise on the Stages of the Path to Enlightenment*, which is perhaps the most celebrated Buddhist meditation manual in the history of Tibetan Buddhism. Apple's approach is systematic and focused as he discusses Tsong-kha-pa's views saying, for instance, that itself is the root of mental afflictions. Moreover, although Tsong-kha-pa adheres to the general Buddhist tenet that the mind's natural state is luminous and pure he, in reflecting on other Buddhist philosophical views, emphasized that this does not mean that the mind has always been primordially free from mental afflictions. Instead, the luminosity and purity of the mind signify the potential to be free from negative mental afflictions. In this way, he has shown his philosophical preference for Nāgārjuna's Madhyamaka school. These and other discussions in Chapter 13 highlight how Buddhism sees that which mindfulness-based psychotherapies are attempting to rectify.

Following these three classic Buddhist studies articles come two Buddhist studies-led interdisciplinary chapters (Chapters 14 and 15) by Michael Drummond and Mu Soeng. In his work, Drummond analyses the Vipassana meditation technique of the observation of bodily feelings as taught by S. N. Goenka, with reference both to Eugene Gendlin's historically important contributions to Experiential psychotherapy and to the Pāli suttas. Both the Pāli system, of which Goenka is representative of, and Gendlin employ the observation of bodily feelings in their goal of deconstructing mental afflictions. Although they are not generally viewed as sharing similarities in their therapeutic approaches, this chapter dissects the techniques used by each and demonstrates their common internal structures.

Mu Soeng then discusses Zen Koan practice as a vehicle for mental health with reference to psychological insights of this practice by the psychotherapist John Suler who 'has done one of the most effective explorations of parallel breakthroughs that take place in koan practice and psychotherapy'. Mu Soeng reminds us that koan practice is sharply focused on the delusions that manifest as a result of seeing the personality as a permanent, solid entity, an ontologically stationed self. Thus, the koan practice strips away these layers of deception which in fact are nothing more than the extension of the self and in so doing ultimately deconstructs the self as a 'self-validating' entity.

These two chapters further develop the way forward for Buddhist studies-led interdisciplinary articles that examine the experience of meditation at the comparative level of tenets guiding meditation practice with psychotherapeutic insights into personality change.

The section closes with Christopher Tori's wide-ranging and methodical inquiry into the introduction of Buddhist teachings and practices in the scientifically informed, pragmatic, and persuasively Protestant society of the United States. Tori reviews the academic literature on this issue and its implications including an examination of the social and cultural characteristics that facilitated the transference of Asian meditation traditions to an Occidental setting. He persuasively argues that mindfulness meditation is (and will continue to be) the central organizing factor in American Buddhism.

As a whole, these dynamically written articles offer a concise view of the foundation from which the mindfulness-based interventions have sprung, covering both the principles and practices of Buddhist mindfulness meditation, as seen in the ancient texts and as practiced today.

Considering how today's Buddhist mindfulness meditation is being utilized in mindfulness-based and other related psychotherapies, the reader will then turn to the second section of Part II. As described in Tori's overview of the development of both psychotherapy research and contemporary practice, there have been several syncretistic paths by which Buddhist perspectives and thought have been influencing development of contemporary therapeutic practice for over 30 years. A significant influence on the integration of meditative techniques into therapy has come from a natural melding of Buddhist approaches to understanding optimal human functioning and developments within clinical and research psychology. Most contemporary psychotherapy researchers and scholars in the therapeutic applications of meditation and mindfulness came to this approach first through personal experience in meditation, either during travel to Asia (i.e. Goleman and Kristeller, among others), within the United States/Europe (Marlatt and Jones), or both. They then sought to understand and use these experiences, both from within the traditional Buddhist literature and from within their own training background in psychology.

Another important line of development was the growing appreciation of the need to address the interaction of mind and body within both psychology and medicine. Western medicine, growing out of European philosophical traditions, had substantially disengaged the workings of the mind from an understanding of physiology. Although the disciplines of neuropsychology and psychophysiology had been established early in the twentieth century, by the 1960s and 1970s virtually no programs in clinical psychology (or in medical schools) took an integrated approach to understanding mind–body processes. Early research on the psychophysiology of meditation, informed by both the Buddhist and Hindu philosophical traditions in which integration between mind and body was assumed, played a major role in creating the new field of mind–body medicine. For example, Goleman was part of a laboratory group at Harvard, with Richard Davidson and Gary Schwartz, that conducted some of the early psychophysiological investigations of meditation effects. Davidson and Goleman continued their line of investigations focused on understanding the neuro-physiology of emotional experience. Kristeller was also influenced by that research, integrating Schwartz's self-regulation theory and her understanding of Buddhist principles into the treatment of eating disorders beginning in the early 1980s. Paradoxically, one of the foremost sources of influence on the continued development and dissemination of mindfulness-based meditation within mind–body medicine is neither a psychologist nor a physician. Jon Kabat-Zinn, a molecular biologist by training, provided a model for bringing mindfulness meditation practice to the general public, first with chronic pain patients and then more broadly. While holding true to Buddhist principles (he was informed by his deep personal practice within both the Zen and Vipassana traditions), he strove to

integrate these principles with his knowledge of physiology and anatomy. He also created one of the first entirely secularized models for teaching mindfulness meditation in order to make it acceptable within a medical setting, and because he believes that the truth lies in the direct experience of practice. In creating a viable model for therapeutic application of mindfulness meditation, yet one which is informed by both Buddhism and therapeutic principles, his work has substantially influenced that of many others including Kristeller, Teasdale and Marlatt as noted in their chapters that follow.

Another important path to the scientific investigation of meditation, again influenced by personal experience, was through cognitive-behavioural approaches to psychotherapeutic change. Several of the researchers represented in this volume, including Marlatt and Kristeller, found that their personal experiences with meditation or mindfulness-type practice provided a path to personal development that was not fully understandable within existing principles in cognitive and behavioural psychology, yet could be understood by integrating Buddhist perspectives into theories of conditioning and cognitive science. While drawing to a limited degree on textual Buddhism through formal and informal study, they primarily have worked with mindfulness theory and practice from their own backgrounds in cognitive-behavioural theory, recognizing that mindfulness approaches contribute an approach that extends and complements cognitive-behavioural theory and therapies. Furthermore, they have brought their training as scientists and researchers to exploring the underlying mechanisms involved in the therapeutic applications of mindfulness practice. For others, notably Hayes and Teasdale, the linkage is in the other direction; while working primarily within contemporary psychological theory, they developed models of psychological processes that others then encouraged them to consider within the context of Buddhist mindfulness theory. In doing so, they found an overlap in understanding that is compelling, because it points to the universality of human experience. As Hayes has noted, we may be onto something when very different roads lead to similar destinations.

The section then opens with Daniel Goleman's overview (Chapter 17) of the Mind–Life conference with HH the Dalai Lama in Dharamsala, India in March, 2000. The issues examined in Goleman's chapter revolve around the Buddhist and scientific views of negative emotions (i.e. how they arise and how they can be deconstructed, how positive emotions can be developed and how children can likewise be educated to identify and constructively work with negative emotions). The discussions also include the role of meditation in both working with negative emotions and in developing positive emotions. The article closes with an overview of the neurological measurements done at the University of Wisconsin under Richard Davidson and at the University of California at Berkeley under Paul Ekman and Robert Levenson on a Tibetan Buddhist monk while engaged in various meditation practices.

Following Goleman's chapter come the first three specialists working with *mindfulness-based interventions*. Jean Kristeller, Alan Marlatt and John Teasdale

have written on their specific mindfulness-based interventions that they and their teams have developed to address specific psychological problems. Kristeller's chapter (Chapter 18) examines her work on Mindfulness-Based Eating Awareness Training (MB-EAT) that applies mindfulness meditation and principles to changing disordered eating patterns in obese individuals diagnosed with binge eating disorder.

Marlatt and his research team on the other hand describe the development of their Mindfulness-Based Relapse Prevention programme while exploring the contribution of Buddhist psychology (as it applies to mindful observation of bodily feelings and the contents of the mind) to psychological interventions aimed at the prevention and treatment of addictive behaviours. Finally, Teasdale describes a programme that directly melds cognitive approaches to treating depression with the Mindfulness-Based Stress Reduction (MBSR) programme developed by Jon Kabat-Zinn. The Mindfulness-Based Cognitive Therapy programme that he and his colleagues have developed significantly reduces the risk of relapse, compared to treatment as usual, in individuals who have had three chronic cycles or more of clinical depression.

Following in order, the Hayes chapter (Chapter 21) then offers theoretical explanations on his Acceptance and Commitment Therapy (ACT). The Hayes team compares how ACT uses mindfulness with other various therapeutic interventions that also use Buddhist mindfulness principles and practices as their main tool of rectification of emotional-cognitive distress. They further maintain that a 'naturalistic, theoretically sound, and empirically useful conceptualization of mindfulness is needed'. With this they offer that mindfulness practice can be understood as the voluntary, moment-by-moment, interaction with cognitive and emotional events. However this is enjoined without succumbing to the normal distortions of interpretative evaluations of such events. This resistance to yielding to distorted interpretations is termed 'defusion' and it is held that this underlies the ability to maintain non-evaluative contact with these events. In this way mindfulness embraces an accepting and defused contact with the present moment.

Subsequent to Hayes, the Ciarrochi chapter (Chapter 22) is the second of two articles that examines the theoretical aspects of Acceptance and Commitment Therapy (ACT). Ciarrochi introduces the Emotional Intelligence technique of effective emotional orientation to ACT, in which one learns to continue the pursuit of one's ambitions despite difficult emotional experiences. In this way mindfulness is of critical importance in allowing the individual to stay abreast of one's ongoing emotional life. He then gives a review of the research that demonstrates a link between how one experiences emotional difficulties and negative indices of well-being. The tendency of experiencing emotional problems as threats rather than challenges, including the inclination to escape rather than to face the difficulties, has been associated with depression, anxiety, hopelessness, suicidal ideation, health complaints and neuroticism. This all indicates that the observation of one's experience of negative emotion provides the individual with a powerful tool to retain her or his independence amidst difficult psychological situations.

Coming after these five chapters, all of which employ mindfulness principles and practices, is Jeremy Safran's elucidation (Chapter 23) of how the therapist's own mindfulness meditation practice is critical in monitoring her or his therapeutic relation with the client. Termed 'metacommunication', Safran points out how the psychoanalyst can use mindfulness in her or his clinical practice. Clearly it would be equally useful to therapists working within any therapeutic approach.

Chapter 24 by Levine, which is the final one of the section, then gently guides the reader to reflect on the earlier contributions of psychotherapeutic methods. He examines insight therapy, in which the understanding of oneself and others is further developed, and cognitive therapy, wherein individuals learn to attend to and systematically restructure negative mental habits (which has several parallels in the Pāli suttas, for example Majjhima Nikāya's Vitakkasaṇṭhāna Sutta). Levine correctly reminds us that these methods, also including systematic desensitization to irrational fear and assertiveness training, where equanimity and right speech are taught as the alternative to anger and fear, are a natural support for the an individual's determination to live according to Buddhist objectives. In consideration of the previous reports on psychotherapeutically adopted mindfulness practice, it might be interesting to see a hybrid approach developed with the therapeutic techniques discussed by Levine.

The book concludes with an epilogue coauthored by editor D. K. Nauriyal and contributor Christopher Tori. The chapter gives voice to the volume's contributors regarding 'where we are' and 'where are we going' with respect to the interface between the scientific study of the mind and Buddhist thought. It was noted that religion, *qua* religion, is seen as being based on different assumptions than science and hence eliciting opinions, favourable and skeptical, as concerns the Buddhism–Science dialogue, was seen as an optimum way to close the book's journey. Amongst these differing opinions presented, it is interesting to note that the authors unanimously agreed that there is considerable appreciation, amongst themselves and their colleagues, of the key Buddhist views connected to consciousness, self-control and ethics.

In closing, it has become clear to the editors, in the course of working with all of the contributors to the book, that they understand that theory and practice must go together. In viewing the broader historical perspectives and interactions between geographical regions and cultures, the transcending of the traditional boundaries of academic inquiry by specialists in applied psychology and Buddhist studies reminds us that many cultures were greatly influenced by the Buddhist teachings as they grew out of India so many years ago. The mindful observation of bodily and mental phenomena is, and continues to be, a common heritage of all humanity.

## Notes

1 This is to say to attempt to correctly understand what a given text is saying about itself.
2 For a foundational examination on this subject, see Cabezon, J. (2003) 'Buddhism and Science: On the Nature of the Dialogue', in Wallace, B. A. (ed.) *Science and Emotion*, New York: Columbia Press, *passim*.

3 The term 'vipassana' is translated as 'insight' that which one attains from practicing any one or all of the four establishings of mindfulness (*satipaṭṭhāna*). For a full rendering of how the Pāli suttas understand this key meditation teaching of the Buddha, see Anālayo (2003) *Satipaṭṭhāna: The Direct Path to Realization*, Kandy: Buddhist Publication Society.

4 To cite several instances, Lance Cousins (http://www.samatha.org/ireland/), Peter Harvey (http://www.samatha.org/localgroups/) and Rupert Gethin (http://www.sharpham-trust.org/program.htm) are three influential Pāli Buddhist studies scholars who practice and often teach Buddhist meditation. All three web sites were retrieved on January 3, 2005. This of course brings to question the impact of meditation on a Buddhist studies specialist's scholarship. How and to what extent would a strong daily meditation practice, say of two hours a day, plus remaining mindful throughout one's daily activities and interspersed with regular periods of retreat, support a correct interpretation of what is being said in the ancient texts of any Buddhist tradition? To what extent would the quality of the work of, say, Richard Gombrich be due to his meditation practice, or if he is not practicing meditation, due to the power of his logic and common sense, as well as with adequate language skills, through which he did such notable research in uncovering the details of the Buddha's engagement with his Brahmin interlocutors? (see, Gombrich, R. (1990) 'Recovering the Buddha's Message', in *Buddhist Forum: Seminar Papers 1987–1988*, Skorupski, T. (ed.) London: SOAS, pp. 5–23; reprinted in Earliest Buddhism and Madhyamaka, Reugg, D. and Schmithausen, L. (eds) Leiden).

To take the same question into the Buddhist sangha, the Thai monk scholar and meditation master Buddhadāsa Bhikkhu urged that Buddhaghosa's commentarial view of Dependent Origination, which reflects three separate transmigrations in its 12 factors, three contiguous lifetimes of an individual's conscious continuum according to past volitional actions (symbolic of the endless transmigration in *saṃsāra*), is seriously flawed. In place of this traditional pan-Buddhist view, he asserted that the suttas offer only a cognitive view of Dependent Origination. This then is a model showing how dukkha, and therefore the self, arises and falls from experience to experience and how to reverse this process and gain awakening in this lifetime (Buddhadāsa Bhikkhu (1992) *Paṭiccasamupāda: Practical Dependent Origination*, Nonthaburi, Thailand: Vuddhidhamma Fund).

This view caused considerable controversy in Asian Buddhist circles and there were no doubt monks who also were deeply practiced in meditation, as well as being versed in the Buddhist textual traditions, who disagreed with Buddhadāsa's views. How are we to then understand these incongruencies? In which way would it be possible to ascribe to the insufficient level of meditational attainments? Such questions seem worthy of PhD research.

5 Two pertinent and interesting cases indicative of the self-correcting research methodology in Pāli Buddhist studies will be mentioned here. First, there is now little doubt about the correct understanding of *anattā* (not-self). This might seem a natural understanding but in fact it was not always the case. For instance the Pāli scholar and past president of the Pāli Text Society (1959–1981), Ms. I. B. Horner (who translated the Vinaya Piṭaka to English: (1949–1951) *The Book of Discipline*, in 5 vols., London: Pāli Text Society) went on record (Horner, I. B. (1936/1979) *The Early Buddhist Theory of Man Perfected*, Delhi: Oriental Books. p. 41) arguing that 'The self (*attā*) as both divine and human was no more repudiated by early Sākya (the Buddha) than were either the Ātman as Brahman, or *ātman* as the self of man in the Upaniṣads.' In short, she held that the Buddha did not repudiate, in his discourses, an inherently abiding permanent self. This is a view that was later fully discredited by Western academic scholars of the Pāli suttas. It is also the process that the West must go through in the transplantation of the

teachings to the Occident. It has to be digested and then explained by individuals within the receiving culture. In the case of Western culture with its Christian roots, issues of self and not-self were difficult to grasp in the early decades of the twentieth century. A more recent detailed account of the Buddha's full repudiation of self in general and in relation to the early Upaniṣads can be read in Gombrich's (1997) *How Buddhism Began*, New Delhi: Munshiram Manoharlal. It was also a subject that his predecessor Jayatilleke (1963/1980) dealt with in his *Early Buddhist Theory of Knowledge*, Delhi: Motilal Banarsidas.

A second and more recent academic endeavour to falsify another scholar's view (on which it seems the jury is still out) was Bhikkhu Bodhi's critique (in 'A Critical Examination of Ñāṇavīra Thera's "A Note on Paṭiccasamuppāda," ' parts 1 and 2, *Buddhist Studies Review* (1998) 15, 1 and 15, 2, *passim*) of the British Bhikku Ñāṇavīra (and by extension Thailand's Buddhadāsa Bhikkhu), both of whom refuted the Pāli commentarial tradition's Three Lifetime Interpretation of Dependent Origination. It is also worth noting that Bhikkhu Bodhi has further elaborated on this subject in his introduction to the Nidānasaṃyutta section of the Saṃyutta Nikāya (Bodhi Bhikkhu (2000) (trans.) *The Connected Discourses of the Buddha*, Summerville, MA: Wisdom, pp. 515–528).

6 For example, the work of the British school of Pāli Buddhist studies as represented by Richard Gombrich, David Kalupahana, Lance Cousins, Y. Karunadasa, Peter Harvey, Rupert Gethin, Steven Collins, George Bond and Damien Keown. To this must be added the expert English translation of, among others, the Majjhima Nikāya by Bhikkhus Ñāṇamoli and Bodhi (1995) *The Middle Length Discourse of the Buddha*, Kandy: Buddhist Publication Society and of the Saṃyutta Nikāya by Bhikkhu Bodhi (2000) *The Connected Discourses of the Buddha*, Summerville, MA: Wisdom.

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To all of these friends and also to our families who stood by us through the long hours away from home, we keep you in our hearts.

D. K. Nauriyal
Michael S. Drummond
Y. B. Lal

# Part I

# AN UNDERSTANDING OF CONSCIOUSNESS FROM TRADITIONAL BUDDHIST PHILOSOPHICAL PERSPECTIVES

# 1

# THE FIRST-PERSON PERSPECTIVE IN POSTMODERN PSYCHOLOGY

*John Pickering*

## Prologue: what Nietzsche sought

Nietzsche was among the first to recognize the predicament in which human beings had been left by the scientific revolution. In his powerful, aphoristic way, he depicted, without regret, the death of God, the passing of the major value-giving myth of Western culture. He recognized that this left a void, which the science of his day could not fill. He sought a new science, one that would do justice to the potentialities of human beings.

Nietzsche's historical analysis marks the end to the belief in the existence of a uniform value-giving world view. His perspectival attitude to truth and value points towards the pluralist condition of knowledge that had to take its place. While it may be less secure than the certainties of modernity, it is, or at least Nietzsche hoped it could become, a condition in which radical transformation may be possible. This is the postmodern condition in which we now find ourselves.

The abuse of "Postmodern," to mean obscure or pretentious, is merely an expression of anxiety. Set this reactionary protest aside and it is clear that something important is at issue. This is a general reorientation of culture which has gradually opened the way for new syntheses of traditions.

For psychology it is an opportunity to move on, to discard restrictive metaphysical assumptions inherited from previous periods and to diversify our understandings of mental life by enriching the means used to study it. This opportunity is being taken up by a global community whose resources are the more powerful for being drawn from a wider range of disciplines than would have been acceptable even a few decades ago.

Here we will look briefly at the impact of postmodernism on psychology and then at the status of subjective experience as a source of psychological data.

## What is postmodernism good for?

The plurality of views and practices that characterize the postmodern condition are the complement of what Lyotard called "skepticism towards metanarratives"

(Lyotard 1984). Lyotard noted that it has become difficult to accept that any single set of ideas or practices could completely explain what the universe is like or how the human condition fits into it. In this more plural condition of knowledge, the over-commitment to objectification that has restricted psychology can be eased and the relationship between systems of thought like Buddhism and Western psychology may be treated more evenhandedly.

This is to rediscover the spirit of William James' radical empiricism. That is, nothing found in experience is to be denied and nothing is to be admitted save that it can be found in experience. This, crucially, includes the experience of experience itself. James (1950), in describing the experience of mentally searching for something that hovers on the edge of recollectability, puts it this way, on page two of his monumental *Principles of Psychology*:

> [N]o mechanical cause can explain this process, nor can any analysis reduce it to lower terms or make its nature seem other than a datum, which, whether we rebel or not at its mysteriousness, must simply be taken for granted, if we are to psychologize at all.

This is not to say that James wished the mystery away. Later, on page 182, he states his belief that there are necessary limits to what human beings can know about their own minds:

> [N]ature in her unfathomable designs has mixed us of clay and flame, of brain and mind, . . . the two things hang indubitably together and determine each other's being, but how or why, no mortal may ever know.

This quote comes from a passage in *Principles* in which James contrasts one for whom only a soul could explain human mental life with one who takes a firm positivist line. His remarks are offered to ". . . he positivistic one who wishes to give a tinge of mystery to the expression of his positivism . . . ."

Despite these limitations on what we can know about it, James warned that, consciousness must not be neglected if psychology is to have any credibility. This warning was largely ignored as the subject developed. This was, in part, because modern psychology, the issue of a nineteenth-century union between philosophy and physiology, was conceived at the highpoint of confidence in science. The successes of the natural sciences, and the prodigious technological progress that came with them, made it seem obvious that nature could be completely understood.

An example, among many, was the biologist Ernst Haekel who, writing at about the same time as James was writing *Principles*, gave us this vision of a completely knowable universe:

> The great abstract law of mechanical causality (mechanische Kausalität), now rules the entire universe, as it does the mind of man. It

> is the steady, immutable pole star, whose clear light falls on our path through the labyrinth of the countless separate phenomena.
>
> (Attributed to Haeckel in Barfield 1926: 188)

This confidence was felt in the life sciences too. James is an honorable exception among the first modern psychologists in holding to a more modest position on what science could reveal about the mind. Other founding fathers, Helmholtz for example, expected that psychology would eventually become a branch of physics. Religious approaches to mental life were to be dismissed as dogmas inherited from the Dark Ages. Thus humiliated, they would be left behind as scientific psychologists ascended into the broad, sunlit uplands of rational acquaintance with their own condition.

To facilitate this heroic progress, the world and the mind were to be regarded with dispassionate objectivity. This austere detachment, it was assumed, would make science immune from distortion by prejudice and superstition. Its discoveries could thus be used to create a benign and just society. This ideal was expressed by an intellectual community stretching from the *philosophes* of the Enlightenment to the scientists of the present day. The common objective is to investigate the world in a rational and systematic way and to use what is found for human good. This was the Enlightenment Project, the metanarrative of modernism.

Postmodernism is a rupture in this project. The violence of the twentieth century showed all too clearly that scientific rationality does not of itself ensure a secure and fair life for all. The prospects for violence in the coming century being greater, it shows all too clearly that the forces unleashed by science and technology cannot be contained. The resulting globalized geopolitics, what Giddens calls the "runaway world," is a central feature of the postmodern condition (Harvey 1990; Giddens 2000).

Informed skepticism towards the Enlightenment Project or any such all-embracing metanarrative is a major feature of the postmodern condition (Lyotard 1984). It applies to any system of concepts and practices, including science and Buddhism. Buddhism cannot be usefully approached as a matter of faith. Equally, faith in science as the systematic, progressive, and authoritative disclosure of pre-extant reality, has to be abandoned. At the postmodern turn we have to recognize that:

> The Enlightenment's ascription to science of a prescriptive authority whereby other forms of knowledge can be humiliated is itself an illusion . . . a unitary scientific method, even a scientific world-view, is merely one of the many superstitions of enlightenment cultures.
>
> (Gray 1995: 154)

To ascribe to Buddhism truths that cannot be questioned will not do either. Instead, the task is to create a pluralist framework, within which Buddhism and science take their places among many ways of discovering, as the biologist

John Haldane once put it, that "the universe is not only stranger than we suppose, but stranger than we *can* suppose." (This quotation is widely attributed to Haldane but an exact source is seldom given, see e.g. Bryson 2003.)

Indeed, scientific discoveries during the twentieth century have undermined the worldview that made science appear so universal at the end of the nineteenth century. Phenomena at the subatomic level demonstrate that detached observation is a special case and that what it discloses is fundamentally incomplete. The physical world has turned out to be subtly interconnected at all levels. Discoveries in the life sciences likewise show that inappropriate treatments of living systems, which reduce organisms to mechanisms, provide only a limited type of understanding. Organic systems are complex wholes whose self-organizing activity is intrinsically historical. They evolve to exhibit emergent properties not pre-figured in any particular part of the system. Thus no inventory of parts at a particular instant, however accurate and complete, could of itself explain how the system as a whole behaves.

This metaphysical shift needs to be recognized in psychology, since its major epistemological gambit is still little more than the analytic decomposition of complex wholes into supposedly simpler parts. This will not get it very far with its principal object of interest, the dynamic unfolding of human mental life. This is the most complex process known to science, part of what Whitehead called the "creative advance of nature" (Whitehead 1920: 164). Within this advance, patterns of organic causation dialectically and seamlessly unite parts and wholes. Attempting to isolate particular components of this advance, and hence to prioritize particular types of causal relationships, is a strictly limited methodological gambit and as a general epistemological framework it is quite inadequate. For psychology to retain the reductive ethos and mechanistic metaphysics of nineteenth-century science is an encumbrance.

This is not to reject science's findings or its methodology. It is, however, to recognize that what they suggested was universal and absolute is actually limited, and historically relative. This is taken as a sign of intellectual maturity by Richard Rorty, a philosopher sometimes identified with postmodernism, possibly to his dismay, since he thinks "The word 'postmodernism' has been rendered almost meaningless by being used to mean so many different things" (Rorty 1999: 262).

But the postmodern reappraisal of the authority of science would certainly meet with his approval. In commending the work of Thomas Kuhn, Rorty notes: "Kuhn's major contribution to remapping culture was to help us see that the natural scientists do not have a special access to reality or to truth" (176).

Rorty notes that the postmodern turn means that it is no longer possible to establish what he calls a "normal discourse." This is a primary explanatory vocabulary, almost always identified with scientific concepts, to which all other ways of describing the world are secondary. The idea of a normal discourse lies at the heart of the fear of science. It is the fear that the world, and the human condition with it, will be made too comprehensible. As Rorty puts it "The fear of science, of 'scientism,' of 'naturalism,' of self-objectivation, of being turned by too much knowledge into a thing rather than a person, is the fear that all discourse will become normal discourse" (Rorty 1980: 388).

Like John Dewey, his role-model, Rorty rejects the idea that scientist and philosophers discover eternal, pre-extant, truths. Instead, they contribute to the evolving conversations through which human beings coordinate their views of the world and attempt to lead their lives together. A paraphrase of Rorty's position would be: "truths are made, not found" (see Rorty 1999: xvii).

This does not mean that enthusiasm for science has diminished. Presently, cognitive neuroscience and genetics have the totemic role that physics and chemistry had at the start of the previous century. However, the cultural context is different. Science and technology are treated with more caution rather than being hailed, uncritically, as progressive. One reason is increasing concern about the ecological impact of technology. Another, more directly the result of the postmodern turn, is that that scientific discoveries are not now taken to be the privileged disclosure of how the world "really is." Instead, they are regarded as provisional creations suffused with cultural values, part of what Ernest Becker called the "fragile fiction" that people construct in order to make sense of a world not of their making (Becker 1971).

The theoretical and methodological pluralism of the postmodern turn help to enrich the fiction and make it more resilient. Practices and insights from other systems of knowledge are entering into a new and more balanced discourse with science (Griffin 1988). This is not mere "anything goes" relativism, but a move towards the discursive production of knowledge through dialogue. Rather than one particular tradition claiming to have the final say, new meaning is synthesized in informed conversations between traditions. Inevitably, the geopolitical facts of life will mean that from time to time some traditions will have greater influence than others. Presently, the globalization of knowledge and the Westernization that follows it is distorting Eastern traditions but in time we can expect a more balanced interchange to emerge (Goonatilake 1999).

In sum, what has been proposed here is that postmodernism, interpreted constructively, is a condition of radical pluralism in which new meaning is synthesized in conversations between traditions that may formerly have been assumed to be too disparate. No one conceptual vocabulary can be assumed to be the final word on anything; this takes in both scientific and religious traditions. Hence Western psychology may interact with Buddhism in a more evenhanded and productive way. This interaction has been expanding for two decades or so, and the postmodern turn has helped to make it more informed and productive.

## Towards postmodern psychology

Postmodernism has broadened and diversified both the theory and methods of psychology (Kvale 1992; Gergen 2001). This has led to the changes to be sketched in the following sections, which concern the decline of Cognitivism and the return of consciousness as a central topic of mainstream research. Additionally, bodily feeling and experience, primordially matters of the first-person perspective, are once more being accepted as primary psychological data. Here,

and later, "feeling" will be used to mean *qualia*, the experience of perceiving, thinking and acting. It is because of feeling in this sense that "Consciousness is what makes the mind body problem really intractable" (Nagel 1974: 435).

The reappearance of feeling, of the first-person perspective is a welcome, if overdue, change in psychology. It is overdue because two of the major paradigms that shaped the discipline in the twentieth century, Behaviorism and Cognitivism, both adopted the implicit mechanistic metaphysics of nineteenth-century science. As a result, both ignored William James' warning and were equally dismissive of consciousness.

Behaviorists considered subjective mental processes to be methodologically intractable. Since they could not be observed directly or quantified, no properly scientific account could be given for them. Therefore, thoughts, feelings, emotions, and consciousness were virtually ignored. It seemed almost to be a point of honor to deny the first-person perspective any place in psychology, no matter how significant they were felt to be in everyday lived experience. They were merely phenomenological illusions that would, as part of the heroic ascent of science, eventually be dispelled by more objective data.

Accordingly, Behaviorists limited themselves to observing the external manifestations of mental life. This strategy was successful up to a point and the period left a legacy of effective techniques. But it also had major shortcomings. Many experiments of the era were unnatural, animals pressing levers in cages being the paradigmatic case. Behaviorism was also unable to provide a satisfactory account for reflexive and open aspects of human mental life, such as language and creative problem-solving.

Concern about these shortcomings reached a critical mass around 1955, at which point Behaviorism was rather suddenly displaced as psychology's central paradigm in the "Cognitive Revolution" (Gardner 1985). Cognitive psychology, or Cognitivism as it will be termed here, approached the mind as if the brain was an information processing system like a computer. Computational models of mental processes were tested against human performance in more naturalistic experiments on perceiving, remembering, making decisions, solving problems, and using language.

This strategy too has been successful and Cognitivism has provided the conceptual and methodological resources of mainstream psychology until quite recently. Significantly, it was assumed that Cognitivism would permit the computational essence of mental life to be separated from culture and even from biology (Gardner 1985: 6). Moreover, Cognitivism, like Behaviorism, aimed to describe mental life in third-person terms. How the mind seems from the outside was taken as primary. How it seems from the inside, the first-person world of experiences, feelings, and value were secondary. This experiential world was something that would be dismissible as a phenomenological error once mental life had been properly understood computational terms. To propose that the essence of mental life lay in computation, and hence could be formalized, was seen as a way to create a universal theory of cognition (Newell 1991). It is in this

sense that Cognitivism exhibits both methodological and conceptual continuity with Behaviorism.

Hence, Cognitivism, like Behaviorism before it, left psychology at a reductive *impasse*. To seek a formal computational account for human mental life is to search for something that cannot be found. It is a Cartesian conceit that harks back to the Enlightenment Project. It is to try to frame the "Normal Discourse" that Rorty has shown to have become impossible. Although Cognitivism has been useful, computation per se no longer seems a plausible candidate for a universal psychological theory.

Considered against a backdrop of the *realpolitik* in Western universities, Cognitivism can be seen to be an attempt to give psychology the identity and authority of natural science (Pickering 2000). Following the postmodern turn this restriction is easing. Alternatives to Cognitivism, such as Connectionism and the dynamic systems approach, have appeared. Their significance here is that they are part of postmodern psychology and that they help to open the way to more informed interaction with Buddhism.

Connectionism is a critical response to the idea that the mind is what the brain does and what the brain does is, essentially, computation. This cannot be a helpful proposal since brains lack the functional architecture to carry out computations in the way that computers do, at least, computers operating according to the now-conventional von Neumann theory of computation. Von Neumann stated this quite clearly at the dawn of the age of modern computing theory (von Neumann 1958). Brain activity is far less homogeneous than computational theory requires. Unlike computers, where information is stored and processed at well defined locations, brains comprise densely interconnected networks.

Connectionism is an attempt to understand this activity from the bottom up, as it were, by making models of the dense interconnectivity and massively parallel activity of natural nervous systems. These models have inputs from and outputs to their environment. Some of their connectivity is programmed in advance but some is the result of activity in the network, which in turn depends on the activity in the world around it. The capacity for self modification is built into networks which, hence, can become actively attuned to their environment.

How well networks will serve as psychological models, is not yet clear. Even the very largest networks so far constructed are minute when compared with natural nervous systems. They are nevertheless proving to be of technological significance in the recognition of auditory and visual patterns. Connectionism also provides a powerful conceptual vocabulary in which to restate some enduring questions, such as the interaction between nature and nurture.

Whatever their significance turns out to be, the point of interest here is that Connectionism is necessarily historical. Cognitivism sought the essence of mental life in timeless formal principles which were independent of the history of the mental being concerned. Connectionism, by contrast, is a psychological theory without essences. Where Cognitivism proposed rules and representations, Connectionism proposes only connections, activity, and history. Any particular

state of a network, and thus by extension any mental state, is explained in terms of the conditions that gave rise to it. There is a striking resemblance here to Buddhist view that mental life reflects the ceaseless arising of interactive conditions.

Other critical responses to Cognitivism include dynamic systems theory and theories of embodied cognition (Varela *et al.* 1991; Clark 1999). These hold that mental life reflects the particular organic system in which it is expressed, in contrast to Cognitivism which treats organisms as if their nervous systems were computationally identical. The embodied cognition and dynamic systems approaches, by contrast, take the nervous system to be engaged in a cyclic process of adjustment to the flow of action in which organisms participate. Now different organisms act in fundamentally different ways. Accordingly, rather than treating all nervous systems as if they performed identical computational functions, they need to be treated as participants in unique patterns of activity. These patterns extend beyond the organism to reflect the particular conditions in which the activity occurs, activity in the whole system is a constantly evolving state of sensitive chaos. The similarity to Buddhist notions of interdependence and conditioned existence is again striking.

These developments indicate that psychology is reclaiming cognition from computational reduction (Nunez and Freeman 1999). Mental life cannot be formalized. Instead, it has to be treated as an aspect of organic action, inseparable from the biological and cultural processes which are its vehicle. With the move towards embodiment, and away from the hyper-rationalized computationalized approach of Cognitivism, emotion and feeling are once again being treated as the core of mental life (Damasio 1996, 1999). Moreover, the first-person perspective, for so long exiled from the discipline is back. A number of psychologists are seeking to bring together the resources of conventional scientific techniques with a systematic inquiry into the experience of participants in psychological experiments (Jack and Roepstorff 2003).

It seems that William James' warning, that psychologists should not forget the primacy of the first-person perspective, is being recalled. That it was forgotten shows how far Behaviorism and Cognitivism took psychology from the world of everyday lived experience, where it is patent that feeling, not reason, is the essence of psychological life.

The last two decades has seen an explosion of interest in consciousness, rather as if something repressed had returned. Psychology has, as it were regained consciousness, bringing psychology face to face with awareness itself (Chalmers 1995; Shear 1999). Consciousness is once again at the centre of the research arena, where William James originally put it. It is a uniquely significant phenomenon for scientific investigation since to investigate it properly; science will have to enlarge both its methods and its worldview. Phenomenological methods are increasingly used in psychology and since there is some unfamiliarity and residual mistrust of them, it is being increasingly accepted that traditions where such methods have been used for millennia will have something to offer. These developments will be important in the interaction with Buddhism in the coming decades, which is the concern of the next section.

## Prospects, problems, and possible outcomes

During the eras of Cognitivism and Behaviorism, the attitude of mainstream psychology to religious traditions was essentially that of nineteenth-century science. The assumption was that, since they were concerned with beliefs, faith, and values, religions could have no real interaction with science, the latter being concerned with hypotheses, investigations, and empirically established facts. Faith and reason do not mix. To compare them was regarded as a category mistake.

Although this attitude has hindered contact with Buddhism, psychologists did occasionally note that it presents an account of mental life comparable with Western systems (e.g. Thouless 1940; Suzuki *et al.* 1970). There was also an increase in contact with Buddhism in the 1960s but it suffered from the superficiality of the then fashionable engagement with all things Eastern. Subsequently though there has been more informed work, especially in the area of dynamic psychology (e.g. Molino 1998; Safran 2003).

While the prospects for interaction are improving many limitations remain, some of them being distant echoes of the assumed opposition of science and religion. But, ironically, since science now provides most people with their creation myth, their image of themselves and an understanding of their relation to the rest of the universe, it has had to take on some of the cultural roles of religion. For most scientists this is unwelcome as it seems to compromise the integrity of science. But this is only true if science is saddled with being a uniquely authoritative, progressive human understanding, replacing all others.

Now science deserves a special place: it has permitted the prediction of events and has increased the technological control people have over their conditions of life to an unprecedented degree. However, the postmodern reappraisal shows that science reflects its cultural context, as any human system of ideas and practices must. To frame a hypothesis about a phenomenon is to express a belief about what sort of a thing it might be. Likewise, choosing a method of observation expresses a belief about how a phenomenon will disclose itself. The choices and beliefs expressed in science reflect their cultural context just as those expressed in religious traditions do.

It is unrealistic to propose that science is somehow outside the more universal arena of inquiry, within which our cultural forms, such as Buddhism, also approach the common problematic experiences of human existence. Buddhism has promoted investigations of mental life that have been critically and systematically developed over millennia, mainly through the use of first person techniques. There is every reason to suppose that these will complement the third-person finding arising from scientific investigation of the mind. It is unhelpful to assume there can be no interaction between them merely because of the supposed incompatibility of science and religion inherited from the last few centuries of Western thought.

More helpful is the paradigm shift, itself part of the postmodern turn, in which the mechanistic worldview of the nineteenth century is being displaced by one

based on organic processes (Griffin 1998). Process philosophy is an enduring strand in Western thought that stretches from pre-Socratic philosophers, through the neo-Platonists to contemporary figures such as James, Bergson, Whitehead, and Bohm. Although they express it in different ways, these philosophers share the view that mind is a part of, not apart from, what Whitehead called "the creative advance of nature." It is significant here that process philosophy is again attracting attention since paradigm shifts in science actually start with a revision of implicit metaphysics (e.g. Rescher 1996, 2000; Gare 1999: 128).

The changes in psychology sketched earlier reflect just such a revision. They lessen hindrances that linger on in psychology as implicit nineteenth century attitudes. With the decline of Cognitivism and the vigorous return of interest in consciousness there has come an increased contact with phenomenological traditions (Varela and Shear 1999). The interaction between psychology and Buddhism has moved into a more productive phase. For example, treatments of selfhood and its relation to the wider order of nature are now appearing that, to a greater or lesser extent, are influenced by Buddhism (e.g. Parfitt 1987; Clark 1991; Macy 1991). The resemblance to *anattā*, is again striking. Instead of a Cartesian substance, selfhood is seen as dynamic, interconnected, primordially relational and essentially without essence (Pickering 1997).

In fact, this is not a good time for essentialism in general. A worldview without essences is replacing the mechanistic metaphysics of the nineteenth century. In theories of evolution, development, and cognition the systems view is displacing attempts to explain the dynamics of complex wholes by attributing causal powers to their parts (Oyama 2001). In psychology too, interaction with Buddhism has recovered from the superficiality of the 1960s and now demonstrates maturity and critical depth (e.g. Ramakrishna Rao 2002). Cycles of contingency are the underlying field of being from which organic action, human cognition, and culture emerge. Treatments of causality are moving from the linear to the circular (Rosch 1994). These conceptual developments, together with the methodological broadening of postmodern psychology, all enrich contact between science and Buddhism and point towards an era of closer interaction (Waldron 2000).

## Buddhism and psychological science

Questions arise here that go beyond merely the methodology of investigating the mind to the purpose in doing any investigation at all. Buddhism values personal, direct investigation from the first-person perspective. It is readily available and, with appropriate training can become more accurate and systematic. It is also considered to be intrinsically valuable since it enables the investigator to live more skillfully. Psychology, by contrast, following the ethos of nineteenth-century science, puts greater value on third-person depersonalized investigation which is assumed to be value-neutral. How skillfully psychologists themselves live is neither here nor there, although, in the spirit of the Enlightenment Project, it is assumed that psychological investigation will help to improve the conditions of life.

Now the postmodern turn takes us beyond the unlikely proposition that the concepts and practices of science are value-neutral. Value-laden aims are implicit in the nineteenth-century inheritance that still shape contemporary psychological science. It is assumed that mechanistic reduction is possible, that it will allow greater prediction and control of mental life and that this is desirable.

But value-neutral knowledge is a fiction. Knowledge becomes value laden by virtue of the manner of getting it and the purposes to which it is put. This is particularly important for psychologists to take on board since theirs is the science that is taken to most directly mirror the human condition. If psychology denies the first-person perspective any significance, adopts mechanistic metaphysics and aims for prediction and control, then the outlook for human autonomy is poor. The actual experience of human beings has no place in such a science. It is as if we look into the mirror only to find we are not reflected in it.

If instead psychology's metaphysical framework was the ceaseless arising of conditions without essence, then it would more directly reflect the world of lived experience, as Husserl, Bergson, and James proposed it should. That world, after all, is the world in which the psychologists themselves live, and to acknowledge this would help create a more humane and less alienating discipline. However, it is very important in Western academic *realpolitik* for psychologists to appear "scientific." Accordingly, experience itself is downgraded as something secondary, something to be explained *away*. In their struggle to be accepted as scientists, psychologists needed to show that they too could do the reductive job on consciousness, their central phenomenon that other scientists appeared to have done on theirs. Physicists suggested that heat was "just" motion. Biochemists suggested that life was "just" metabolism. Geneticists suggested that evolution was "just" to alter the genome – and so on. Given this, it is no surprise to find psychologists suggesting that experience is "just" computational mechanisms in the brain. To do so gives them the authority of science.

This search for the status of a natural science explains why psychology presently has little more to offer than an attempt to reduce the complexities of experience to *something else*, something which is simpler and more "real." It also explains the massive preference for objective over subjective methods. This conceptual poverty and methodological imbalance are signs of the reductive impasse at which psychology has been stalled until recently. In attempting to do for mental phenomena what natural science appears to have done for physical and biological ones, psychologists had set themselves an impossible task. The formidable technology used in psychological research does not of itself give the discipline the authority to pronounce on experience. It may produce finer and finer descriptions of, say, brain activity, but what will be revealed by doing this? It will be only part of the story; a description of the vehicle for consciousness.

What this vehicle carries, the flow of conscious experience itself, cannot be reduced. It participates in a system with innumerable interacting parts both within and without the boundaries of the body. This means that consciousness cannot be fully understood from third-person descriptions of particular parts of the system,

no matter how accurate they may be. Events within the brain are but one such part, and as yet it is unclear what their role is in shaping the situated actions of people and other organisms within the larger systems that they inhabit.

But things are improving. The developments in psychology that have been sketched here, especially embodied treatments of cognition and the increasing influence of dynamic systems theory, shift attention strongly towards the whole and away from the parts. Methodologically, things are also changing for the better. Phenomenology, qualitative methods, and first-person data are becoming more acceptable in mainstream psychology (Varela *et al.* 1991). It is becoming clear that while third-person data are reliable and powerful, is a reductive mistake to assume that *on their own* they could provide a complete account of experience. To understand how human experience is bound up in the systems that support it will also require first-person investigation, changing science's methods and its image. This is the peculiar challenge in investigating consciousness: to preserve the integrity of scientific methods whilst at the same time broadening them to treat the world of lived experience.

Buddhism starts with that world and deals with it in ways that everyone can recognize. While scientific psychology makes a distinctive contribution, it is nevertheless a highly specialized one, tied to a particular era and cultural milieu. Cognitivism does not directly help people to understand their own experience, nor is it intended that it should. By contrast, the resilience and endurance of Buddhism testifies that many people from many cultures and at many periods of history have recognized in it something universal about their own lived experience.

Now the findings of science are also supposed to be universal, but this universality is most easily demonstrable in physics. In the life sciences it is less so and in mainstream experimental psychology, it is even more questionable. Science expresses the outward-directedness of Western thought over the last millennium. This dominates the study of the mind, despite the fact that the principal thing we know about it is our inner experience. It has meant that third-person descriptions of the outer manifestations of mental life are far more highly valued than first-person accounts. What mental life feels like from the inside has been treated with suspicion in Western psychology because previous attempts to use this as primary data have failed. This suspicion extends to meditative traditions where there appears to be no equivalent of the controlled experiments and publicly verifiable data that are the hallmark of good scientific research (e.g. Bucknell 1997). Even serious research on meditation can still lapse into something akin to orientalism by treating meditation as an anthropological curiosity – an esoteric practice of another culture, often by implication, a more primitive one.

Those more familiar with Buddhist traditions will recognize that this is not a well-informed position. The use of meditation can be as systematic and critical as any scientific program. Charles Tart, whose work was recognized by the American Psychological Society's Distinguished Scientific Contribution Award in 2001, also has experience with meditation. In a personal communication he put

his view thus:

> My professional and personal studies on consciousness, especially mindfulness meditation (*vipassana*) have convinced me that ordinary consciousness is quite undifferentiated and unskillful at observing its own manifestations – hence the failures of early Western attempts at an introspective psychology that was to be a science of the mind *per se*. But we can learn to become much more discriminative observers of our own mental processes. Western psychology gave up far too early trying to become a science with mental events as primary data – we simply weren't trained.
>
> (Tart 1999)

Thanks to the broadening of psychology's methodological resources, mistrust of meditation is diminishing. The mistrust was due in part to projective distortion during the 1960s when so much of what went on was superficial and Eastern traditions were commercialized into faux spiritual fashion-accessories. Things have improved greatly in the past few decades. Following the work of Carl Gustav Jung, we are now more aware of how Eastern traditions can be distorted by the way they are presented in the West (e.g. Clarke 1995). Moreover, better teachings and more balanced research is now available (e.g. Wallace 1999). Many psychologists, like Tart, now have some experience of the direct engagement with mental life that meditation provides (e.g. Rosch 1997).

However, despite the changes sketched here, there are clear and important differences between scientific psychology and Buddhism. There will remain a necessary tension between meditation and conventional scientific methods. Private experience obtained under special conditions and after special training does not rest easily alongside the public data of experimental science.

Many psychologists, though, are beginning to recognize that the way forward is not too exclude any method of studying mental life but continually to enrich their synthesis. This in turn will not only enrich psychological research but also raise broader questions about its purpose. What sort of knowledge of the mind do we want and why do we want it?

Experimental psychologists want the sort of knowledge that is produced by good scientific research. They want it because scientific knowledge of mental life is intrinsically interesting, an end in itself. However, scientific knowledge, of the mind or anything else, is not value-neutral. The fate that has always awaited knowledge gained because it was an end in itself is to end up as technological means.

Presently we face a serious ecological crisis, whose most basic cause is the alienation of human experience from nature by runaway science and technology. The ecological crisis is thus also a psychological crisis. Accordingly, rather than technologizing the mind, as both Behaviorism and Cognitivism were wont to do, psychology needs to study it within its biological and cultural contexts.

It will help this project to engage with Buddhist views of selfhood and its organic interdependence on the world around it (Macy 1991; Hillman 1995). A synthesis of traditions will help create a more balanced science of mental life and one more relevant to the difficulties facing us.

It will present its own difficulties of course. It is easy to misattribute to Buddhism things which are merely contemporary concerns. The genuine openness of science and its capacity for radical revision should not be underestimated when compared with what in Buddhist traditions is rigid and authoritarian. But so long as they are recognized, these difficulties need not hinder the pursuit of better interaction between Buddhism and psychology. The decline of the mechanistic metaphysics of the nineteenth century and the growth of an organic worldview in the twenty-first open the way to deeper, more informed and relevant interaction between the two traditions.

## Epilogue: has what Nietzsche sought been found?

(The page numbers that follow refer to Walter Kauffman's translation of *The Gay Science*, see Nietszche (1887))

In *The Gay Science*, Nietzsche's (1887) last aphoristic work, he sketched a discipline that would allow human beings to become all that they might be. This was not aimed at improving science and philosophy, even though their limitations were irksome to him. He commended the scientists of his day and their distaste for philosophy, since he too rejected it as unadventurous and normative. However, he did not ally himself with natural science, *Naturwissenschaft*, in which he found the mere utilitarian investigation of the world as it is. His was to be *Geisteswissenschaft*, a humanitarian practice, though one only for the few who could endure its rigor. These few would then become able to experience the world as it might be when human consciousness attained the higher condition he hoped to encourage.

This was to be a discipline indeed, an arduous, testing calling that would go beyond the regulative projects of the humanities into new realms of human potential. This project, although it has often been dismissed as sinister elitism, has similarities to Buddhism which likewise encourages human beings to transform themselves through effortful investigation of their own experience.

Despite this rejection, the resemblance is nonetheless genuine enough and practitioners of both Buddhism and *The Gay Science*, unlike those who never subject their own experience to rigorous examination, are those who "want to look our experiences as straight in the eye as if they represented a scientific experiment, hour after hour, day after day" (319). This exhortation to be constantly mindful of mental conditions as they arise is known, and advocated, in the Pāli Buddhist tradition as *sati*.

*The Gay Science* is not gay because it promotes happiness or comfort. Its practitioners have to understand that it will, necessarily, require endurance: "Every philosophy, every art may be regarded as a healing and helping appliance in the

service of growing and struggling life: that always presupposes suffering and sufferers . . . " (370).

The first noble truth in Buddhism is that suffering, *dukkha*, is an intrinsic part of experience. While it cannot be eliminated, it can be understood. This is part of what liberation means. Again, as in Buddhism, liberation also means to break out from the cycles of endless conditions within which we are trapped. What *karma* and *saṃsāra* are to Buddhism, the "eternal return" is to Nietzsche.

This strange surmise, that events must endlessly recur, appears in *The Gay Science* as a demon's curse: ". . . this life as you live it now and have lived it, you will have to live again and again, times without number . . . " (341).

But *The Gay Science* is gay just because it holds out the prospect that the curse can be lifted. That is its liberating purpose and its exhilarating reward. Its practitioners feel.

> as if a new dawn was shining on us when we receive the tidings that "the old God is dead; our heart overflows with gratitude, amazement, anticipation, expectation. At last the horizon appears free again to us, even granted that it is not bright."
>
> (343)

Of course, these resemblances do not mean that *The Gay Science* or anything else in Nietzsche, was advocacy of a faith-like, religious approach to understanding the human condition. It was not Nietzsche's intention to ally himself with any religious tradition, let alone Buddhism, which he dismissed as a palliative for the nihilistic depression that follows the realization that the world does not have the meaning that religions say it has (Morrison 1997: 27). The Buddha too is dead:

> After the Buddha was dead, his shadow was for centuries pointed out in a cave – an immense, frightful shadow. God is dead: but, men being what they are, perhaps there will for millennia still be caves in which his shadow is pointed out. – And we – we still have to conquer his shadow too!
>
> (108)

But conquering the shadow of the Buddha is not a rejection of Buddhism. It is a warning not to substitute authority for experience. Nietzsche warns that teachings are means, not ends. Only individuals can transform themselves and teachings must be transcended in order to be realized. But this too, is to be found in the many similes in Buddhism which tell us that teachings are to be used and then discarded, like the raft that has to be abandoned once the shore has been reached.

Psychology as it is taught in contemporary universities, whether they are in Washington, Paris, or Tokyo, is not what Nietzsche sought. It is normative, while *The Gay Science* is transformative. However, this could change. The developments that have been sketched here, particularly the rehabilitation of the first person

perspective, while they do not of themselves create a transformative discipline, are perhaps a step in the right direction.

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2

# THE SPIRITUAL SIGNIFICANCE OF EMPTINESS IN NĀGĀRJUNA'S *MŪLAMADHYAMAKAKĀRIKĀ*[1]

*William L. Ames*

> "I will enter nirvāṇa with no appropriation; nirvāṇa will be mine." Those who grasp in that way have a great grasping of an appropriation.[2]
>
> (MMK 16.9)

The goal of Buddhist practice is generally thought to be the attainment of nirvāṇa. The author of this verse seems to be saying that this goal, or at least the desire to attain it, is self-contradictory. This is all the more surprising when we learn that the verse is from the *Mūlamadhyamakakārikā, The Root Verses on the Middle Way*, written by Nāgārjuna, the great Mahāyāna Buddhist philosopher. What understanding of Buddhism could have led Nāgārjuna to make such statements? To answer this question, we will examine Nāgārjuna's *Mūlamadhyamakakārikā* (MMK) with particular emphasis on the implications that his ideas have for the Buddhist spiritual path. This chapter will thus be a study of one aspect of Nāgārjuna's thought as expressed in his major work, the MMK.

Nāgārjuna (active *c.*150–200 CE)[3] was the founder of the Madhyamaka[4] school of Buddhist thought, which is one of the two major philosophical schools of Mahāyāna Buddhism, along with the Yogācāra school. The Madhyamaka is best known for its doctrine of emptiness (*śūnyatā*). The idea of emptiness is found in the "perfection of discernment" (*prajñā-pāramitā*) sutras, some of which are among the earliest Mahāyāna sutras. While the sutras expound emptiness in a discursive way, the Mādhyamikas use systematic argument.

Emptiness, for the Madhyamaka school, means that dharmas are empty of intrinsic nature (*svabhāva*) (in this context, "dharma" means "phenomenon"[5]). All Buddhists hold that conditioned dharmas arise in dependence on causes and conditions. For the Mādhyamikas, this fact of dependent origination (*pratītyasamutpāda*) implies that dharmas can have no intrinsic, self-sufficient nature of their own. Since dharmas appear when the proper conditions occur and

cease when those conditions are absent, the way in which dharmas exist is similar to the way in which mirages and dreams exist. Thus attachment and aversion are undermined, since ultimately, they have no substantial objects and since attachment and aversion themselves lack any self-sufficient status of their own. Moreover, the Mādhyamikas argue that if things existed by their own intrinsic nature, they would be changeless because they would be independent of all outside influences and nothing could cause them to change; but this contradicts our everyday experience of change.[6]

We can expand this brief description by looking at some key verses of the MMK (the MMK is Nāgārjuna's chief work, though there are a number of other works written by or attributed to him[7]). We will first consider what "intrinsic nature" means, why Mādhyamikas reject it, and the implications of that rejection. The relation between dependent origination and the absence of intrinsic nature in things, which the Mādhyamikas call "emptiness," is considered next. Possible misconceptions about emptiness are then examined. We see that for Nāgārjuna, the state of affairs represented by emptiness cannot be adequately described by either term of conceptual dichotomies, such as existence and nonexistence. Thus language, with its dualistic structure, cannot express emptiness in a direct and literal way. Finally, we look at Nāgārjuna's understanding of how the experiential realization of emptiness functions to bring about liberation.

To begin with, what is this *svabhāva*, this thing of which dharmas are supposed to be empty? In the fifteenth chapter of the MMK, Nāgārjuna writes,

> The arising of *svabhāva* through conditions and causes is illogical.
> A *svabhāva* arisen through causes and conditions would be artificial (*kṛtaka*).
>
> (MMK 15.1)
>
> But how will *svabhāva* be called artificial?
> For *svabhāva* is noncontingent (*akṛtrima*) and without dependence on another.
>
> (MMK 15.2)

These two verses tell us that *svabhāva* is not artificial or contingent and that it does not depend on anything else. For this reason, I have translated *svabhāva*, which literally means "own nature," as "intrinsic nature," because the *svabhāva* of a dharma is intrinsic to it and not dependent on other circumstances. (Here "nature" should be understood as an internal principle or independent identity that makes something what it is.) Since causality means that results are dependent on their causes, intrinsic nature is incompatible with causality. Thus in chapter twenty-four of the MMK, Nāgārjuna tells an opponent,

> If you see a real existence of entities due to [their] intrinsic nature,
> In that case, you see entities without causes and conditions.
>
> (MMK 24.16)

> You reject both effect and cause, agent, instrument, [and] action,
> Origination and cessation and result.
>
> (MMK 24.17)

The point of the latter verse, of course, is that if there are no causal relations between things, then effect, cause, agent, instrument, and result are meaningless, while action, origination, and cessation are arbitrary.

Conversely, things that arise dependently cannot have intrinsic nature, since they depend on causes and conditions while intrinsic nature is "self-contained" and independent of any external influences. So in chapter seven of the MMK, Nāgārjuna tells us,

> That which arises dependently is tranquil [or "extinct," *śānta*] with regard to intrinsic nature (*svabhāvataḥ*).
>
> (MMK 7.16ab)

The use of *śānta*, "tranquil/extinct" here is probably meant to evoke the idea of nirvāṇa and to hint at the idea that the point of Buddhist practice is not to change something that ultimately exists into something else, but rather to see clearly the way that things already are, which may be quite different from the way we take them to be. This is a point to which we will return later.

Intrinsic nature is incompatible not only with causality but also with change of any sort. Something that has intrinsic nature could not be affected by external circumstances precisely because its nature is "intrinsic." Thus nothing could cause it to arise or cease, and nothing could modify it in any way. Hence Nāgārjuna says,

> It will be unborn and unceasing and immovable.
> If there is intrinsic nature, the world is devoid of various [temporal] stages.
>
> (MMK 24.38)

Making a similar point, he says,

> If there were existence by intrinsic nature,[8] there would not [ever] be nonexistence of this [thing that exists by intrinsic nature],
> For alteration of intrinsic nature is never possible.
>
> (MMK 15.8)

If something exists intrinsically, nothing could cause it to stop existing.

Since we do observe change and alteration in the world around us and in ourselves, we might wonder whether change is not some ultimate fact that requires some sort of intrinsic nature to explain it. In other words, we might think that there must be some real substratum that undergoes change. Nāgārjuna addresses this argument by showing that change cannot be considered an ultimate

reality. First he has a hypothetical opponent say,

> [You, Nāgārjuna, claim that] entities (*bhāva*) lack intrinsic nature because one observes [their] alteration.
> An entity without intrinsic nature does not exist, because [you hold that] there is emptiness of entities.
> (MMK 13.3)

> Of what would there be alteration if intrinsic nature does not exist?
> (MMK 13.4ab)

Nāgārjuna replies

> Of what would there be alteration if intrinsic nature does exist?
> (MMK 13.4cd)

> Neither the alteration of that [thing] itself nor of what is different [from it] is logical,
> Because a young man does not grow old [and] because an old man does not grow old.
> (MMK 13.5)

> If there is alteration of that [thing itself], milk itself would become curds.
> What[9] other than milk will become curds?
> (MMK 13.6)

The second half of MMK 13.4 alludes to the argument that intrinsic nature cannot change. The next two verses consider the case of something that is supposed to change into something else, such as a young man becoming old or milk becoming curds. We cannot say that the young man is the one who becomes old because at some point in the process, he would no longer be young, contradicting the original assumption that the young man is the one undergoing the process. Nor can we say that the old man becomes old, since he is old already and cannot become old again (here we are treating "young" and "old" as two distinct states without regard to degrees of either). The arguments here implicitly allude to the analysis of motion in chapter two of the MMK.[10]

Thus there is no ultimately real change that needs to be explained by invoking intrinsic nature. Conversely, if change were based on intrinsic nature, it would have to be ultimately real; but it is not. It is worth noting that the objection and response in MMK 13.3–13.6 are repeated in a condensed form in MMK 15.9:

> If intrinsic nature does not exist, of what will there be alteration?
> If intrinsic nature does exist, of what will there be alteration?
> (MMK 15.9)

The only significant difference from MMK 13.4 is that *prakṛti* is used in MMK 15.9 in place of *svavbhāva*; but as stated in note 8, they appear to be synonymous,

based on the context and the commentaries, so I have translated them as "intrinsic nature" in both cases. Similarly, *anyathātva* is used in MMK 15.9 in place of *anyathābhāva*; but they both seem to mean "alteration."

A related point is made in chapter twenty-one:

> Arising and ceasing are not possible for something empty.
> Arising and ceasing are not possible for something nonempty.
> (MMK 21.9)

"Something empty" is something that lacks intrinsic nature. "Something nonempty" is something that possesses intrinsic nature.

Causality and change are issues that any philosophy must deal with. Moreover, from a specifically Buddhist point of view, causality plays a central role in the form of dependent origination, the principle that conditioned dharmas arise in dependence on causes and conditions. In its general form, "When this exists, that comes about; because of the origination of this, that originates. When this does not exist, that does not come about; because of the cessation of this, that ceases,"[11] dependent origination is a principle of the way the world works. In its specific, twelve-membered form,[12] dependent origination accounts for the ongoing process of saṃsāra in terms of twelve successive factors, each of which is a causal condition for the next. The cessation of these same twelve factors, each ceasing because of the cessation of the previous factor, describes liberation from saṃsāra. Dependent origination was considered such an important aspect of Buddhism that in the Pāli canon, the Buddha is recorded as saying that one who sees dependent origination sees the Dharma.[13]

For Nāgārjuna, too, dependent origination is a central Buddhist concept. Echoing the Buddha, he equates perceiving dependent origination with perceiving the Four Noble Truths:

> One who sees dependent origination sees these [Four Noble Truths],
> Suffering, the origin [of suffering], the cessation [of suffering], and the path [to its cessation].
> (MMK 24.40)

Perhaps even more striking, given the importance of emptiness for Nāgārjuna, is this famous verse:

> What dependent origination is, that we call emptiness.
> That is designation dependently (*prajñaptiṛ upādāya*). Just that is the Middle Way.
> (MMK 24.18)

We have seen that for Nāgārjuna, causality, and thus dependent origination, would be impossible if things possessed an intrinsic nature. Emptiness is the absence of

intrinsic nature in things. Dependent origination thus implies emptiness. Moreover, one could argue that emptiness implies dependent origination. If things are empty, they have no intrinsic nature and cannot exist by intrinsic nature, so they must exist dependently or not at all. If emptiness and dependent origination imply each other, it makes sense to equate them as two sides of the same coin.

It is for this reason that Nāgārjuna says,

> Everything works for one for whom emptiness works.[14]
> Nothing works for one for whom emptiness does not work.
> (MMK 24.14)

If things lack intrinsic nature, then the causal processes of everyday life and of the Buddhist path are possible; but if things are not empty of intrinsic nature, then causality is not possible. Moreover, since intrinsic nature is unchanging, a world where things existed by intrinsic nature would be a static world, frozen in place. Our world of changing, causally dependent things "works" only when emptiness "works," that is, when things are empty of intrinsic nature.

The second half of MMK 24.18 makes two additional important statements. Dependent origination/emptiness is said to be designation dependently, (another possible interpretation is that the verse is saying that emptiness itself is a dependent designation). "Designation dependently" is an intriguing phrase that does not occur elsewhere in the MMK. It may mean that dependence need not only be causal, but can also be conceptual, as the notion of "long" is logically dependent on the notion of "short" and vice versa. It may also allude to the idea that things as we take them to be are dependent on the designations we make, in the sense that our linguistic and conceptual maps could have divided up the world differently.

This extended sense of dependence may explain another statement that Nāgārjuna makes in the MMK:

> Because there is not any dharma that is not dependently originated,
> Therefore there is no dharma that is not empty.
> (MMK 24.19)

The difficulty here is that only conditioned (*saṃskṛta*) dharmas are dependently originated, and in Buddhist Abhidharma, dharmas such as space and nirvāṇa are considered to be unconditioned (*asaṃskṛta*). In chapter seven[15] of the MMK, Nāgārjuna shows that the origination, duration, and cessation of things do not exist by intrinsic nature. He concludes,

> Because origination, duration, and cessation are not established, the conditioned does not exist.
> Since the conditioned has not been established, how will one establish the unconditioned?
> (MMK 7.33)

The unconditioned is defined by negating the conditioned. Space, for example, is the absence of obstruction; and nirvāṇa is the end of suffering. Nāgārjuna himself offers a more elaborate negative definition of nirvāṇa:

> Not abandoned, not attained, not annihilated, not permanent,
> Not ceased, not originated: this is called nirvāṇa.
> (MMK 25.3)

If the conditioned is not ultimately real, neither is its absence an ultimately real fact. The unconditioned, moreover, can be said to be logically dependent on the conditioned because a negation is meaningless without something to be negated.

If we take the alternative interpretation mentioned earlier, that emptiness is *a* dependent designation, then the point is to emphasize that emptiness should not be hypostatized as some sort of eternal absolute. Emptiness is a fact about the way that dharmas exist; without empty dharmas, there would be no emptiness. Thus emptiness is logically dependent on the dharmas, and it follows that emptiness itself is empty of intrinsic nature.

Moreover, Nāgārjuna points out that the very concept "empty" is logically dependent on its opposite, "nonempty":

> If there were something nonempty, there would be something empty;
> But there is not anything nonempty, [so] how will something empty exist?
> (MMK 13.7)

Emptiness, the absence of intrinsic nature, is meaningful only as long as the illusion that things have intrinsic nature persists. When that illusion dissolves, emptiness dissolves along with it.[16] As Nāgārjuna says,

> If there is no establishment of an entity, a nonentity is indeed not established,
> For people call the alteration of an entity a nonentity.
> (MMK 15.5)

On the other hand, emptiness is not a nihilistic notion that dharmas do not exist at all. Rather it means that dharmas exist dependently, not by intrinsic nature. Since emptiness can be (and often has been) misunderstood, Nāgārjuna warned,

> Emptiness wrongly seen destroys the slow-witted,
> Like a serpent wrongly grasped or a spell wrongly performed.
> (MMK 24.11)

To think that emptiness means that morality does not matter is to forget that it can be equated with dependent origination. If things have no intrinsic nature, they have no "staying power" apart from the causes and conditions that sustain them. Thus, on the relative level, it becomes all the more important to consider the

impact that one's actions will have on the present and future circumstances of oneself and others. At the same time, one realizes that ultimately, those actions and circumstances have no intrinsic nature that one could hold onto, so it is futile to make them into objects of grasping.

If dharmas do not exist by intrinsic nature and yet they are not totally nonexistent, just what is their ontological status? One way to answer this question is through similes. In chapter seven of the MMK, Nāgārjuna says,

> Like a magical illusion, like a dream, like a city of the *gandharvas*,
> So origination, so duration, so cessation are spoken of.
> (MMK 7.34)

Dreams and the like are experienced; and they may be very vivid; but even on the conventional level, they are not considered to be experiences of something objectively real. Likewise, dharmas appear even though they are empty and are empty even though they appear.

Suppose that one is not satisfied with similes and wants a literal, precise statement describing the ontological status of dharmas. From Nāgārjuna's point of view, this is a demand that cannot be satisfied. In MMK 24.18, dependent origination/emptiness is also called the "Middle Way," as the Buddha famously called his teaching. In one sense, this means that the Noble Eightfold Path is a middle way between the extremes of asceticism and self-indulgence. The sense that is more relevant here is that dependent origination is a middle way between the extremes of existence and nonexistence, or the extremes of permanence and annihilation. This point is made repeatedly in the MMK, perhaps earning Nāgārjuna's school its name "Madhyamaka," literally, "Middlemost."

Regarding existence and nonexistence, Nāgārjuna says,

> "It exists" is a grasping of permanence; "it does not exist" is a view of annihilation.
> Therefore one who sees clearly does not rely on existence and nonexistence.
> (MMK 15.10)
>
> For what exists by intrinsic nature does not [ever] not exist; hus it is permanent.
> "Now it does not exist; [but] it existed previously" thus annihilation follows.
> (MMK 15.11)

But permanence and annihilation are not the Buddha's teaching, as Nāgārjuna makes clear in the following verses:

> Whatever arises in dependence on something is, in the first place, not just that;
> Nor is it different. Therefore it is neither annihilated nor permanent.
> (MMK 18.10)

> Not one thing, not something manifold, without annihilation, without permanence:
> This is the nectar of the teaching of the Buddhas, the protectors of the world.
> (MMK 18.11)

In a continuous stream of causally related dharmas that arise and cease, there are no permanent entities. It also follows that there is no intrinsic nature, since intrinsic nature would be both permanent and independent of causes. There is also no annihilation, in the sense that there is nothing that once existed by intrinsic nature and later ceased. From a slightly different point of view, one could say that there is no permanence because a cause and its effect are not identical; but there is no annihilation because there is an ongoing continuity of causal relationships, rather than an arbitrary replacement of one dharma by another, unrelated dharma.

Thus both permanence and annihilation are rejected; and in MMK 15.10 (translated earlier), Nāgārjuna also rejects both existence and nonexistence because they imply permanence and annihilation, respectively. He is careful to specify in MMK 15.11, though, that he means "existence" in the sense of existence by intrinsic nature and "nonexistence" in the sense of the cessation of something that formerly existed by intrinsic nature.

In addition, Nāgārjuna cites a text in the early Buddhist canon to show that existence and nonexistence were not taught by the Buddha:

> And in the *Kātyāyanāvavāda*,[17] both "it exists" and "iit doe not exist" were negated
> By the Blessed One, who clearly perceives entities and nonentities.
> (MMK 15.7)

Thus Nāgārjuna asserts that

> The weak-minded who see the existence and nonexistence of Entities
> Do not see the tranquil quiescence of the visible,
> (MMK 5.8)

where "the tranquil quiescence of the visible" presumably means the absence of intrinsic nature in visible things.

Nāgārjuna sees the Buddha as having rejected not only permanence and annihilation and existence and nonexistence but also a number of other pairs of conceptual opposites. As we have seen, in MMK 25.3, Nāgārjuna gives a negative definition of nirvāṇa as "not abandoned, not attained, not annihilated, not permanent, not ceased, not originated." In the dedicatory verses of the MMK, he says,

> He who taught dependent origination, [which is] without cessation, without origination,

> Without annihilation, without permanence, not one thing, not something manifold.
>
> (MMK1.A)
>
> Without coming, without going, the quiescence of conceptual elaboration (*prapañca*), tranquil,
> [Is] the perfect Buddha. I pay homage to that best of speakers.
>
> (MMK 1.B)

The point of all these negations, it seems to me, is this: Our conceptual structure, as expressed in thought and language, is implicitly based on the assumption that the world is composed of things that have their own intrinsic nature; but that assumption, once made explicit and analyzed as Nāgārjuna has done, is untenable. Thus in the ultimate sense, the way things are cannot be captured by any concept or its opposite. Hence Nāgārjuna gives the following definition of reality (*tattva*):

> Not ascertained from another, peaceful, not elaborated by conceptual elaborations,
> Without dualistic thoughts (*vikalpa*), not something manifold: this is the definition of reality.
>
> (MMK 18.9)

If ultimate reality is beyond words and concepts, the Buddha's many recorded teachings have to be seen as provisional devices to lead people by stages to a realization that words and concepts cannot express. As Nāgārjuna puts it,

> Everything is real, or not real, both real and not real, Neither real nor not real: this is the progressive teaching of the Buddha.
>
> (MMK 18.8)

Similarly, regarding self and nonself, he says,

> "Self" has been designated; "nonself," too, has been taught.
> "Neither [any] self nor any nonself," has also been taught by the Buddhas.
>
> (MMK 18.6)

The same is true even for the teaching of emptiness. The very concept of emptiness, the absence of intrinsic nature in things, is not immune to Nāgārjuna's critique because, as we saw earlier, it is meaningful only in the context of counteracting the illusion that things do possess intrinsic nature. Thus Nāgārjuna says,

> "Empty" should not be said, nor should "nonempty,"
> Both, or neither; but it is said for the sake of communication (*prajñapti*).
>
> (MMK 22.11)

Nāgārjuna explains in the following way the Buddha's practice of using language to teach something that is ultimately beyond language:

> The Dharma teaching of the Buddhas is based on two truths: The worldly superficial truth and the truth in the ultimate sense.
>
> (MMK 24.8)
>
> Those who do not know the distinction between these two Truths
> Do not know the profound reality in the Buddha's teaching.
>
> (MMK 24.9)
>
> Without resorting to conventional expression, the ultimate truth cannot be taught.
> Without arriving at ultimate truth, nirvāṇa cannot be attained.
>
> (MMK 24.10)

If the Buddha did not use conventional language with its implicit conceptual framework, no one would understand him, except perhaps for a few who were so spiritually advanced that they could intuit his meaning. Even though language is thoroughly dualistic and implicitly based on the assumption that things possess intrinsic nature, the use of language is unavoidable for Buddhist teaching.

Since ultimate truth is beyond words and concepts, it cannot be directly and literally expressed in language. Thus although the Buddha gives provisional teachings, as far as ultimate truth is concerned, Nāgārjuna can say,

> The quiescence of all [dualistic] apprehensions (*upalambha*) [of objects] is the tranquil quiescence of conceptual elaboration.
> No dharma has been taught by the Buddha to anyone anywhere.
>
> (MMK 25–24)

In Buddhism, direct recognition of the nature of reality has soteriological value. As Nāgārjuna said in a verse already quoted, "Without arriving at ultimate truth, nirvāṇa cannot be attained." For Nāgārjuna, the nature of things is their lack of intrinsic nature. As we have seen, this cannot be captured in a verbal formulation or a purely conceptual understanding. Rather, what is necessary is to experience things in a way that is free from our habitual grasping at them as if they had intrinsic nature, and then to stabilize this experience so that it permeates our entire affective and cognitive life. Nāgārjuna succinctly explains the way in which this experience, once stabilized, leads to liberation from saṃsāra:

> Because of the end of action (*karman*) and afflictive emotions (*kleśa*), there is liberation. Action and afflictive emotions are due to dualistic thoughts.
> Those are due to conceptual elaboration, but conceptual elaboration ceases in emptiness.
>
> (MMK 18.5)

Concepts and the words that express them attempt to divide the world into discrete entities with discrete properties. According to the Madhyamaka analysis, these entities have no intrinsic nature, no independent identity; but we relate to them as if they did. Based on this fundamental ignorance of taking concepts to represent real entities, dualistic thinking occurs; and that in turn gives rise to afflictive emotions[18] such as attachment and aversion. (The concepts of self and other and their various ramifications are the most effective in producing afflictive emotions.) Motivated by those afflictive emotions, actions are performed that lead to karmic consequences and rebirth. Ignorance is undone by the realization of emptiness, the absence of intrinsic nature in things.

Like the Buddha, a realized Buddhist practitioner would still use words and concepts in daily life; but there would be no attachment to them, since their limitations would be directly perceived and not just theoretically understood. One corollary of this is that there would also be no attachment to views and doctrines. Nāgārjuna says in the final two verses of the MMK,

> Alternatively, because of the emptiness of all entities, what views of permanence, etc.,
> Will occur for whom, in regard to what, because of what?
>
> (MMK 27.29)

> I pay homage to that Gautama who, out of compassion, taught the good Dharma for the abandoning of all views.
>
> (MMK 27.30)

This applies even, perhaps especially, to emptiness, which has to be understood as a soteriological device, and not as a doctrine to be embraced and defended:

> Emptiness was taught by the Victors as a remedy for all views,
> But they declared to be incurable those for whom emptiness is a view.
>
> (MMK 13.8)

It may occur to us to wonder whether Nāgārjuna's assertion of the emptiness of all entities is not itself a view.[19] In one sense, it clearly is a view, and one which could be and has been disputed by those with other philosophical and religious views. On the other hand, we have seen that Nāgārjuna says

> . . . here is not anything nonempty, [so] how will something empty exist?
>
> (MMK 13.7)

On the level of ultimate truth beyond words and concepts, all views fall away, including the view of emptiness; and on that level, Nāgārjuna has no view.

Then, of course, one could go on to ask whether he does not, in fact, have the view that ultimate truth is beyond words and concepts. The reply might be that this statement is a statement about ultimate truth from the standpoint of relative, conceptual truth, and that on the level of ultimate truth itself there are no views. So one could say that on the relative, conventional level, Nāgārjuna does have views, but that on the ultimate level, he does not.

We are now almost in a position to understand the verse with which we opened this chapter:

> "I will enter nirvāṇa with no appropriation; nirvāṇa will be mine."
> Those who grasp in that way have a great grasping of an appropriation.
> (MMK 16.9)

We still need to explain the term "appropriation" (*upādāna*). It refers to the five aggregates[20] – matter, feeling, conception/perception, mental formations, and cognition – that are taken, "appropriated" as the basis for the designation "self." In other words, we talk about our "selves" based on our mind and body. It is hard to see how there could be a self in the absence of a mind and body, especially a mind. On the other hand, a self seems to be somehow over and above mind and body, so that we sometimes speak of "my mind" or "my body" as if the self were the owner of mind and body. This question is examined from various angles in the MMK (note especially MMK 8.13 and 10.15), and it is concluded that self and appropriation are dependent on each other. Thus neither is established independently, as would have to be the case if they existed by intrinsic nature.

We can now see how MMK 16.9 fits into Nāgārjuna's overall philosophy. If it is an obstacle to liberation to hold on to conceptual views, it is even more of an obstacle to cherish desires that implicitly reify a self and an object of desire and endow them with an imagined intrinsic nature. The attitude expressed by the first line of the verse envisions a self acquiring a spiritually exalted possession, nirvāṇa. Of course, this nirvāṇa is said to be "without appropriation"; but this qualification only insures that it is transcendent enough to make the maximum contribution to the greater glory of the self. Thus the nirvāṇa imagined here only becomes a newer and greater object of appropriation.[21]

Affectively, the problem here is one of pride and craving. Cognitively, the problem is that the self and nirvāṇa are taken, perhaps unconsciously, to possess intrinsic nature. Indeed, for Nāgārjuna, it is this cognitive error that leads one to believe in the substantial existence of self and objects and thus provides the basis on which afflictive emotions, such as pride and craving, can arise (see MMK 18.5, translated earlier).

Does Nāgārjuna, then, reject nirvāṇa and spiritual goals in general as counterproductive? A verse in chapter eighteen of the MMK hints at an answer:

> The nameable has ceased [when] the domain of the [dualistic] mind has ceased,
> For the nature of dharmas is unoriginated [and] unceasing, like nirvāṇa.
> (MMK 18.7)

The term that I have translated as "the nature of dharmas" is *dharmatā*, literally "dharmaness," sometimes translated as "natural condition, true nature, nature of things, nature of phenomena, reality itself," etc. In the second half of the

verse, Nāgārjuna says that the nature of things, the way things naturally are, is "unoriginated [and] unceasing, *like nirvāṇa*" (emphasis mine). Things have never come into being with intrinsic nature, and there is nothing that possesses intrinsic nature for a time and then ceases. Freedom from origination and cessation is supposed to be the nature of nirvāṇa as well, since nirvāṇa is unconditioned. If the way things are, apart from illusions of intrinsic nature, is already free from origination and cessation, then the purpose of the Buddhist path is not to attain some new state but to realize the true nature of things as they already are. In order to do this, it is necessary to see through the illusion of intrinsic nature that makes things appear to have fixed, independent identities. In other words, it is necessary to have a direct realization of emptiness.

## Notes

1 A recent article by Mark Siderits (2003) has a very similar title, "On the Soteriological Significance of Emptiness." Siderits, however, deals with general philosophical issues, whereas the present chapter focuses much more closely on the actual text of the MMK. Also, in a previous paper (1988), I discussed "The Soteriological Purpose of Nāgārjuna's Philosophy: A Study of Chapter Twenty-Three of the *Mūla-madhyamaka-kārikās*." That paper, as its subtitle indicated, was a study of chapter twenty-three of the *Mūlamadhyamakakārikā*. I took the entire MMK into consideration when writing the present chapter.

2 All translations from the MMK in this chapter are my translations from the Sanskrit text edited by de Jong (1977), except for one emendation noted later.

3 The most recent study that I know of Nāgārjuna's dates is Walser (2002). See also Ruegg (1982), pp. 505–508.

4 As a general rule, "Madhyamaka" is the name of the school and its philosophy; a follower of the school is called a "Mādhyamika." See Ruegg (1981), p. 1 and n. 3.

5 The Sanskrit word *dharma* has a number of meanings. For the Buddhist Abhidharma schools, it is an irreducible unit of experience that "bears its own defining characteristic" (*svalakṣaṇadhāraṇād dharmaḥ*); and it is this referent of the word that I am calling simply "dharma." One could also translate it as "phenomenon." When *dharma* means "the Buddha's teaching," I capitalize it as "Dharma."

6 The clearest introduction to Madhyamaka that I know of is the Translators' Introduction to Mi-pham-rgya-mtsho (2002), especially pp. 5–20. (The main text of this work is not at all introductory, being a translation of a commentary by a Tibetan writer on an Indian Madhyamaka work; but the Translators' Introduction serves that purpose extremely well.) Another excellent introduction to the basic ideas of Madhyamaka, with an emphasis on their significance for the Buddhist path, is Tsültrim Gyamtso (2003).

7 For surveys of the various works ascribed to Nāgārjuna, see Ruegg (1981), pp. 8–33; Lindtner (1982), pp. 10–23; and Lindtner (1997), pp. 330–331.

8 In MMK 15.8 and 15.9, the term *prakṛti* is used instead of *svabhāva*. They appear to be synonymous in this context.

9 Read *kasyātha* for *kasyacid*. See Lindtner (1982), p. 26 n. 79.

10 I have translated chapter two of the MMK with Bhāvaviveka's commentary in Ames (1995).

11 This formula occurs several times in the Pāli Canon. See references in *Pali–English Dictionary*, *paṭicca-samuppāda*, s.v. and Rahula (1974), p. 53 n. 1.

12 See, e.g. Rahula (1974), pp. 52–54.

13 See *Majjhima-nikāya* I, pp. 190–191 (cited in Kalupahana (1986), p. 354).
14 It is a little difficult to find the right English translation for *yujyate* in MMK 24.18. The translation "works" comes from Streng (1967), p. 213. Elsewhere, I have translated *yujyate* as "is logical" or "is [logically] possible"; but like many Sanskrit words, it has a number of meanings.
15 I have translated chapter seven of the MMK with Bhāvaviveka's commentary in Ames (2000), pp. 28–76.
16 Compare Jñānagarbha's discussion of this point in Eckel (1987), pp. 76–77, 87–88.
17 Translated by Bhikkhu Bodhi (2000), vol. 1, p. 544.
18 A point that Nāgārjuna does not address is the fact that animals and preverbal human infants have emotions but not language and, presumably, only rudimentary concepts, if any. Candrakīrti, a later Mādhyamika, says in his *Madhyamakāvatāra* that even animals have a sense of self (6.125). In the same work, he says that not only are things thought to have intrinsic nature but that under the influence of delusion, they even appear that way (6.28 and 6.104–105); the same point is made in Candrakīrti's commentary on verse 25 of Nāgārjuna's *Yuktiṣaṣṭikā*.
19 The question of whether and in what sense Mādhyamikas have a view was much discussed in Tibet and also by modern scholars. The most recent discussion that I am aware of is in Ruegg (2000), pp. [105]–232.
20 In his commentary on MMK 10.15 in his *Prasannapadā*, Candrakīrti says, "As to that [verse], because it is appropriated, [it is called] an 'appropriation', [that is], the five aggregates of appropriation (*tatropādī yata ityupādānaṃ pañcopādānaskandhāḥ*)." See La Vallée Poussin (1970), p. 212.18.
21 This kind of attitude toward spiritual attainment has been called "spiritual materialism." See Trungpa (1973), esp. pp. 3–22.

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# 3

# A COMPARISON OF *ĀLAYA-VIJÑĀNA* IN YOGĀCĀRA AND DZOGCHEN

*David F. Germano and William S. Waldron*

How are we shaped by structures and processes outside our conscious awareness? To what degree are these processes bodily, emotional, or cognitive? How do they determine the way we react to or apprehend our world? Are they peculiar to each individual or also intersubjective? Are these structures largely fixed, or are they ongoing constructive processes? How can we bring these structures and processes into conscious awareness? How can reflexive awareness alter their character and influence? Are these processes pure or impure? If they were originally pure, how would deluded and distorted reactive patterns arise? Or if these processes were originally impure, how could they be purified? And if they were originally pure, how would such purity appear within deluded bodily, emotional, and cognitive experiences?

These questions have been raised by countless thinkers over the centuries and systematically addressed by mystics and philosophers alike. We will examine Buddhist responses to these questions in the Indian Yogācāra and Tibetan Great Perfection (*rdzogs chen*) traditions as articulated through the concepts of "foundational consciousness" (S: *ālaya-vijñāna*, T: *kun gzhi rnam par shes pa*) and "foundation/ground" (S: *ālaya*, T: *kun gzhi*), respectively. Originally, the concept of *ālaya-vijñāna* arose in response to the attempt by Abhidharma Buddhists to express all the functions of consciousness (*vijñāna*) in strictly *dharmic* terms (see section Abhidharma: A Systematic Phenomenology of Experience). Our first section thus reviews the development of theories of consciousness in early Buddhism and their problematization within Abhidharma, before focusing on the notion of a "fundamental consciousness" operating outside of conscious awareness that was proffered by the Yogācāra school. These notions were transformed within the esoteric schools of Indian Buddhism from the seventh century on, which were rendered into systematic philosophical discourse in Tibet starting from the eleventh century. The second section will thus examine the foundational consciousness within the works of Tibetan scholar, Longchenpa, the great systematizer of

the Great Perfection tradition in the fourteenth century. This chapter thus sketches out the development of this central notion from Indian Buddhism into Tibetan esoteric discourse.

## *Ālaya-vijñāna* in Indian Buddhist thought

### *Early Buddhist analyses of mind*

#### *The arising of cognitive awareness*

The analyses of consciousness (*vijñāna*) found in the Pāli texts are simple but subtle enough to have invited centuries of later development. As classically expressed, perceptual consciousness arises when an appropriate sense object impinges upon the relevant sense faculty (*indrirya*; "power"), with attention thereto. Types of perceptual consciousness are classified according to their respective sense base: the five faculties of vision, hearing, smelling, tasting, touching, and the sixth, mind. Mental consciousness is anomalous in that it arises in conjunction with both its "own" mental objects, such as ideas, thoughts, memories, etc., as well as with a previous moment of perceptual consciousness as an object. This is a reflexive consciousness *that* we have perceived something visual, etc. The mental mode of consciousness thus encompasses higher cognitive functions, such as abstract thought and language. Some important implications follow from these simple formulations:

- First, temporally, perceptual consciousness is a phenomenon that occurs in dependence upon specific supporting conditions; it is *not* a faculty that actively cognizes objects. Rather, consciousness automatically arises when an appropriate object impinges upon its respective sense base.[1] Note the passive, impersonal syntax.
- Second, constitutively, objects that induce perceptual consciousness are *necessarily* correlative with their respective faculties. And like their objects, the forms of ordinary perceptual consciousness reflect the structure of their supporting faculties. We can only ordinarily see things the way our faculties enable us to.
- Third, contextually, consciousness is also dependent upon the way sense faculties function. Like a spark, a stimulus must be distinctive enough from both its previous moment and its surrounding context in order to stimulate perceptual consciousness. In this sense, *vijñāna only* arises as a function of temporally effervescent yet contextually distinctive stimuli.

It follows that our ordinary awareness of the world has several crucial constraints. It depends upon the responsive structures of the faculties, which themselves only operate in relation to the distinctions that trigger them – distinctions which, like all contrasts, are relational, not stand-alone qualities. The phenomenal "world,"

our world, is thus both ephemeral and constructed at the same time – characteristics that will continue to beguile later Buddhist thinkers.

### *Two aspects of* vijñāna

The constructed nature of experience is highlighted in the second way consciousness (S: *vijñāna*, P: *viññāṇa*) is portrayed in the Pāli texts. As the only process that continues uninterruptedly from one lifetime to the next, *vijñāna* is said to "descend" into the womb at conception, arise throughout one's lifetime, and leave the body at the time of death. To contrast this with the aforementioned perceptual or "cognitive-consciousness," Pāli scholar Wijesekera (1964: 259) designates it "*saṃsāric viññāṇa*," insofar as it is "the basis for all conscious and unconscious psychological manifestations pertaining to individuality as it continued in Samsāra or empirical existence." Although this sense of *vijñāna* is by no means a permanent or eternal self, since it always arises in dependence upon conditions,[2] it does not depend upon perceptual objects.

What this consciousness does depends upon are the psychological and physiological structures brought about by previous karmic actions, the "karmic formations" (S: *saṃskārā*, P: *saṅkhārā*).[3] This is seen in the twelve-limbed formula of dependent arising, where *vijñāna* arises not in dependence upon transient conditions as "cognitive consciousness" does, but upon enduring conditions, such as sense organs, faculties, dispositions, traits, etc. – that is, the *saṃskārā*. The distinction between these "aspects" of *vijñāna*, or more precisely between the conditions that support their arising, is clearly illustrated in these typical formulations:

> Depending on karmic formations consciousness arises (SN.2.2).
> Depending on eye and forms visual consciousness arises (SN.2.73).

What these analyses highlight are the continuous and discontinuous conditions for *vijñāna*, respectively. The conditions underlying the arising of "samsaric consciousness," the karmic formations, are relatively continuous, while those evoking forms of "cognitive consciousness," such as sense objects, are strictly intermittent.

It should be clear, however, that these consciousnesses are neither contradictory nor truly separable, for "samsaric" consciousness is a precondition for perceptual consciousness to arise. As philosopher John Searle has recently pointed out: "Perception . . . does not create consciousness but modifies a preexisting conscious field . . . the field was there before you had the perceptions. You had to be already conscious before you had the perceptual experience" (Searle 2005).[4]

These modes of consciousness are also interdependent. "Samsaric consciousness," together with the karmic formations (i.e. sense faculties) that support it, constitutively influences the arising of cognitive consciousness. And the arising of cognitive consciousness, in turn, continuously modifies the responsive structures of the faculties and thus, by extension, the arising of samsaric consciousness.

This occurs both in the short term, in cognitive processes of learning, memorization, etc, as well as in the long term, in the evolutionary processes of the growth and development of sentient life over multiple generations (which in the Buddhist context includes rebirth).[5]

Hence, these two ways of analyzing the arising of consciousness pertain not so much to distinct forms of consciousness, but to distinct kinds of conditions that support consciousness, some enduring chronologically, others arising momentarily. These give rise, as Pāli scholar and psychologist Johansson (1979, 106) has observed, to "two layers of consciousness: what we called the momentary surface processes, and the background consciousness." The Yogācārins will exploit these distinctions in formulating their own conception of "a basis for all conscious and unconscious psychological manifestations," namely, *ālaya-vijñāna*.

### *Reciprocity between actions, effects, and afflictive dispositions*

These enduring conditions – the karmic formations comprising one's sense faculties, cognitive schemas, affective dispositions, etc. – have not come about haphazardly. They have been brought together, "constructed," through the causal effects of each individual's activities, through their karma (SN.2.64).[6] This idea is not some antiquated artifact unearthed from another time or place, but a sophisticated understanding of the reciprocal relations between forms of consciousness, the actions they instigate, and the effects these lead to – effects which, in turn, tend to reinforce the very conditions that engendered them, creating a positive feedback loop between the constructed schemas and dispositions, actions, and their results.

We can see this in something we all experience: habit-formation. We do something enjoyable, like drinking caffeine or alcohol, which affects our bodies and minds in certain, mostly pleasurable, ways. In the process, these experiences create (or reinforce) specific neural pathways in the brain and body, whose very presence supports their repetition, just as storm runoff creates furrows in the ground that attracts further runoff.[7] As a result, we start to crave (S: *tṛṣṇā*, P: *taṇhā*), both physically and psychologically, the pleasures these actions bring and so tend to repeat them. In this way, our actions reinforce the conditions that lead to their repetition, creating neuro-psychological complexes we call dispositions.[8] In Pāli these are the *anusaya*, underlying tendencies.

These tendencies are the latent counterparts to the three afflictions of greed, hatred, and ignorance, which make actions *karmically* consequential, that is, actions that lead to effects that may be experienced in the future. They "are called *anusaya*, underlying tendencies," a later Pāli commentary explains, "in the sense that they have not been abandoned in the mental continuum to which they belong and because they are capable of arising when a suitable cause presents itself" (MN 1995, 1241, n. 473). Such "suitable causes," of course, are ubiquitous. Whenever some kind of feeling or sensation occurs, such as through sensual contact, these dispositions tend to arise: we tend to respond to pleasure with greed, to pain with aversion, and to neutral feeling with ignorance or indifference

(MN.1.303). These afflictive responses then tend to evoke actions whose long-term effects reinforce the conditions, the dispositional *saṃskārā*s, that supported their arising – thereby perpetuating the patterns of cyclic behavior called saṃsāra.

This is well illustrated in a single passage describing the four "nutriments" that sustain cyclic existence: food, sensual experience, mental volitions (i.e. karma), and consciousness:

> If, monks, there is lust for the nutriment edible food [for sensual experience, etc.], if there is delight, if there is craving, consciousness becomes established and comes to growth. Wherever consciousness becomes established and comes to growth, there is a descent of name-and-form. Where there is a descent of name-and-form, there is the growth of karmic formations. Where there is the growth of karmic formations, there is the production of renewed existence. Where there is the production of renewed existence, there is future birth, aging, and death. Where there is future birth, aging, and death, I say that is accompanied by sorrow, anguish, and despair.
>
> (SN.2.101)

### *The afflictive dispositions and liberation*

Human beings, of course, are complicated. Chief among our underlying tendencies "that have not been abandoned" is the tendency "I am" (*asmīti-anusaya*), our sense of ourselves as enduring entities, agents of our actions, subjects of our experiences and, of course, objects of attachment.[9] This sense of self is one of our most deeply rooted dispositions, the texts suggest, for "even though a noble disciple (*ariyasāvaka*) has abandoned the five lower fetters, still . . . there lingers in him a residual conceit 'I am,' a desire 'I am,' an underlying tendency 'I am' that has not yet been uprooted" (SN.3.131).

Not only are these tendencies not abandoned until far along the path toward liberation, but their presence virtually defines the boundaries of samsaric existence. As the Buddha himself said, it is "impossible" that "one shall here and now make an end of suffering without abandoning the underlying tendency to lust for pleasant feeling . . . to aversion towards painful feeling . . . to ignorance in regard to neither-painful-nor-pleasant feeling" (MN.3.285). Until then, the ever-present possibility remains for these afflictions to reoccur.

These latent dispositions thus serve as continuing conditions for new afflictive responses to occur in much the same way that the consciousness that depends upon karmic formations serves as a continuing condition for new forms of consciousness to arise. Both cognitively as well as affectively, then, early Buddhism not only articulated the underlying conditions continuously supporting perceptual consciousness and active afflictions, but also recognized the indispensable roles they play in the feedback cycle of action, results and afflictive responses that constitutes samsaric existence. This cycle is therefore perpetuated not just through

manifest consciousness and overt afflictive behavior, but also – and even more intractably, through the continuing, underlying conditions that support them. Together, these effectively constitute, as Wijeskera's characterizes "*saṃsāric vijñāna*," "the basis for all conscious and unconscious psychological manifestations pertaining to individuality as it continued in Samsāra or empirical existence."

While early Buddhists clearly recognized the influence of these continuous conditions, they never systematically contrasted them with the transient conditions supporting perceptual consciousness, such as cognitive objects. Thus, although early Buddhists had articulated a sophisticated conception of the interrelation between distinct forms of consciousness, the actions they evoke and the phenomenal experience resulting from them, they left it to the Yogācārins in the third to fifth centuries CE to systematically distinguish the "basis" of samsaric existence in the form of *ālaya-vijñāna*. Their point of departure nevertheless remained the penetrating analyses of mind and experience bequeathed them by the Buddha and his early followers:

- Our experienced world both depends upon and is correlative with our cognitive faculties, which themselves only function in terms of temporally and contextually discrete stimuli.
- The receptivity to such stimuli is determined by the structure of our physiological and psychological complexes (*saṃskārā*), which thus serve as *constitutive* conditions for the formation of our "world."
- These complex structures are themselves constructed through the reciprocal reinforcing relationships between actions, their results, and the afflictive dispositions,
- amongst which, the continuous, underlying latent dispositions, particularly the sense "I am," play crucial roles in the arising and arousal of our perceptions and actions.
- Finally, it is the persistence of these latent afflictions, as with "samsaric" *vijñāna*, that demarcates samsaric existence and whose cessation is thus tantamount to liberation.

But this is not all. The Pāli texts also refer to a form of mind (*citta*) which "is luminous (*pabhassaraṃ*), but defiled by adventitious (*āgantuka*) defilements" (AN.1.10). This, too, never became an object of systematic thought in the early texts, leaving both it and "the basis" of samsaric existence relatively unsystematized. That would require more analytic ambition, the impetus for which is found in the next stage of Buddhist thought, Abhidharma.

### *Abhidharma: a systematic phenomenology of experience*

These analyses of mind from the earliest Buddhist texts may have sufficed for the pragmatic aims of Buddhist practice – were no further questions asked. But questions arose. The Buddha's disciples, facing a bewildering array of doctrines, texts,

and practices from his forty-five years of teaching, soon began sorting, classifying, and systematizing them according to topic, degree of difficulty, and internal consistency. In the process, they drove Buddhist thought in a productive but problematic direction that deeply influenced all later forms of Buddhism, especially Indian Mahāyāna. It was in this milieu of Abhidharma scholasticism (third century BCE to fifth century CE) that the concept of *ālaya-vijñāna* originated, for its most systematic treatments were couched in largely Abhidharmic terms – foremost of which, carrying its own host of problems, was the allusive concept of *dharma*.

There is little doubt that *dharma* is the most important concept in Abhidharmic analysis of experience, an analytic discourse still surviving in South Asia Buddhist traditions. There is considerable debate, however, over its ultimate meaning and ontological status, with different schools each proffering their own interpretations. One school, *Sarvāstivāda*, leaned toward pluralistic realism, another, *Sautrāntika*, toward nominalism, while yet a third, *Yogācāra*, toward mentalism. Despite such differences, Abhidharma analysis provided contemporaneous Buddhists with a common vocabulary, a common conceptual framework – and a common set of problems, as we shall see.

They also shared a common aim: eradicating the afflictions, the maleficent motives by which actions accrue karmic consequences. As the great fifth century scholar, Vasubandhu (AKBh I 3) states: "apart from the discernment of the dharmas, there is no means to extinguish the afflictions, and it is by reason of the afflictions that the world wanders in the ocean of existence."[10] In order to discern the presence of these afflictions, and thereby attenuate and eradicate their maleficent influences, Abhidharmists analyzed the arising of each moment of consciousness. Bhikkhu Bodhi (1993: 4) thus calls Abhidharma a "phenomenological psychology..." insofar as it focuses on "conscious reality, the world as given in experience." This analysis of "conscious reality" self-consciously systematized the same basic terms, and their interrelationships, found in the earliest Buddhist texts. Only now this analysis was focused primarily upon those factors that could be *discretely identified* as influencing "the world as given in experience" from moment to moment. Moreover, it was claimed that these momentary factors – and these alone – were ultimately true (*paramārtha-satya*), ultimately effective in determining in one's ongoing experience (AKBh *ad* I 2b). It is these factors that are called *dharma*s, as each "carries" its own mark.[11]

This *dharmic* analysis has several significant characteristics: it is a *phenomenological* analysis of experience couched in *systemic* terms, terms that are mutually defined and distinguished from one another. It is therefore *metapsychological*, insofar as it self-consciously "deals with the various concepts and categories of consciousness as the primary objects of investigation" Piatigorsky (1984: 8). Finally, analysis in *dharmic* terms was considered an *ultimate* account of "how things really are" (*yathābhūta*).

In conjunction with concerted meditative practice, *dharmic* analysis of conscious experience provides a powerful tool for discerning one's present states of mind and the patterns of behavior and experience that constitute our ongoing existence.

If the strictures of this analysis are strictly adhered to, however, they also create serious conceptual problems. For promoting the factors identifiably affecting one's momentary conscious experience simultaneously entailed demoting other, more subtle or more enduring factors to the status of mere conventionalities (*saṃvṛti-satya*). Moreover, if *dharmic* analysis is limited to what we are (or can be) consciously aware of, and these are the *only* factors accepted as real, then this analysis precludes a full account – in "real" terms – of the very thing it set out to discern: the afflictions that keep beings wandering in the "ocean of existence" until they are abandoned at advanced stages on the path. This engendered, in short, the Abhidharma Problematic.

### *The Abhidharma Problematic*

More specifically, if the afflictions were present and *active* in each and every moment then there would be no possibility of non-afflicted states, and hence no possibility of liberation. But they could not be both present and *inactive* at the same time because *dharmic* analysis only discerns what affects "conscious reality." Nor could they be completely *absent* during non-afflicted states, for once the continuity of the afflictions is severed they would be destroyed altogether, since they have no real existence when they are not present, and this would be tantamount to liberation. The problem with *dharmic* analysis is that it could not readily account for latency,[12] for the persistence of the afflictive dispositions, as present yet ineffective, in the way the early *sutta*s suggested.

The same kind of problem arose with the accumulation of karmic potential (*karmopacaya*), the potential for karmic results to come to fruition in the future. How could these persist within one's mental stream without constantly affecting one's conscious experience? And, like the dispositions, karmic potential also requires unbroken continuity between their originating actions and their ultimate fruition. But if these potentials are not discernibly affecting one's conscious experience, that is, if they are not *dharma*s, then how could they be present? Either they are not "real," in which case they are irrelevant, or they are real and relevant but inexpressible in *dharmic* terms, in which case *dharmic* analysis is either incomplete or not completely ultimate. Simply put, other modes of "existence" had to be entertained.

Abhidharmists were well aware of these problems; it was, after all, the early *sutta*s, with their clear account of samsaric continuities, which they were systematizing. Hence, they addressed them in various ways, the most relevant for our purposes being the notions of seeds (*bīja*) and "perfumations" (or "impressions, predispositions," *vāsanā*). Vasubandhu used these metaphors from the early *sutta*s to suggest how the potential for karmic fruition and the afflictions in a latent state could persist within one's mental stream without directly and discernibly affecting the moment-to-moment arising of mind – and hence evading *dharmic* analysis. But he also considered these metaphors (*prajñapti-sat*; AKBh II 36), not real dharmas (*dravya-sat*) – a tacit admission, it appears, of the limitations of *dharmic* analysis.

Even if these problems were more conceptual than practical, they still disclosed two problematic assumptions:

- that the contents of consciousness were, in effect, homogeneous, that is, that mutually contradictory factors, such as latent afflictive dispositions and manifest meritorious states, could not coexist; and, crucially,
- that the relevant conditions of cognition and behavior were transparent to *dharmic* analysis. As Piatigorsky (1984, 202, n. 17) points out, "the Abhidharma does not deal with what is non-conscious, because the Abhidhamma is a 'theory of consciousness', and the rest simply does not exist in the sense of the Abhidhamma."

But the Abhidharma Problematic undermined these assumptions, leading to the recognition, as Eliade (1973, xvii) put it, that "the great obstacles to the ascetic and contemplative life arose from the activity of the unconscious." As we shall see, in its initial systematic treatments the concept of *ālaya-vijñāna* explicitly addressed this Abhidharmic Problematic in almost exclusively Abhidharmic terms.

### *The Yogācāra analysis of experience*

The early development of *ālaya-vijñāna* can profitably be seen as the gradual integration of the "samsaric" aspects of *vijñāna* found in the early *sutta*s into the terms of *dharmic* discourse favored by the Abhidharmists. This was adumbrated in the third century CE *Saṃdhinirmocana Sūtra*, but only fully systematized in the fourth to fifth century works of Asanga and Vasubandhu, which effectively define classical Yogācāra. We will briefly trace this evolution in several key texts.

#### *Two aspects of* vijñāna *revisited*

It is in an early section of the *Yogācārabhūmi*, a voluminous third to fifth century text attributed to Asanga, that the term *ālaya-vijñāna* probably first appears (Schmithausen 1987, 12, 18, n. 146). It is portrayed there as a basal consciousness that persists uninterruptedly in the material sense faculties during a meditative state (*nirodha-samāpatti*) in which all other mental processes cease. Yet this consciousness "embraces" (*parigṛhītam*) the causal conditions, represented as seeds, for manifest forms of perceptual consciousness to reoccur. In an important terminological innovation, the traditional six forms of perceptual consciousness are characterized as "arising" or "manifesting" (*pravṛtti*) *vijñāna*s insofar as they intermittently arise in conjunction with cognitive objects, in contrast to the uninterrupted stream of sentience newly coined "*ālaya-vijñāna*," whose overlapping senses include "home, base, store" and "clinging."[13] The distinction between discontinuous forms of cognitive consciousness and a continuous non-cognitive consciousness, which was merely implicit in the Pāli materials, is now terminologically explicit.

It is in a few short passages of the *Saṃdhinirmocana Sūtra* that a wholly new model of mind centered on *ālaya-vijñāna* is introduced. First (V.2),[14] *ālaya-vijñāna* is said, like "samsaric" *vijñāna*, to arise at conception and "grow, develop, and increase" based upon its enduring, supporting conditions (*upādāna*): the material sense faculties and, notably, "the predispositions toward proliferation of conventional images, names, and concepts." *Ālaya-vijñāna* arises, that is, in dependence upon our cognitive schemas and the sense faculties that embody them, which are themselves constructed from past actions.

The text then (V.3) suggests the reciprocal relationship between these two kinds of consciousness: *ālaya-vijñāna* is "heaped up (*ācita*) and accumulated (*upacita*) by visual forms, sounds, smells," etc., that is, by the objects of the traditional six "arising" *vijñāna*s. The "arising consciousnesses," in turn, now arise in dependence not just upon the sense faculties and their respective objects, as before, but also "arise supported by and depending upon (*saṃniśritya pratiṣṭhāya*) the 'appropriating consciousness' (*ādāna-vijñāna*)" (a synonym of *ālaya-vijñāna*) (V.4–5). Moreover, they arise simultaneously with each other as well as *ālaya-vijñāna*, resulting in a model of multiple, distinct yet simultaneously occurring cognitive processes, each with its own object. The *Sūtra* (VIII.37.1) describes *ālaya-vijñāna*'s own object as the "indiscernible, stable, surrounding world (*asaṃvidita-sthira-bhājana-vijñapti*)."

*Ālaya-vijñāna* and the "arising consciousnesses" thus reinforce each other: *ālaya-vijñāna* arises based upon physiological and psychological structures (*saṃskārā*), that is, the sense faculties and linguistic and conceptual predispositions (V.2), which together support the simultaneous arising of manifest cognitive processes (V.4–5) (and thereby help determine the specific forms, *ākāra*, they take), the results of which, their specific objects, "heap up and accumulate" in *ālaya-vijñāna* (V.3).

This is another significant development. Perceptual consciousness now arises not only in dependence upon the sense faculties and their correlative objects, as before, but also upon another *kind* of consciousness, one that is itself dependent upon our embodied cognitive schemas, including linguistic distinctions and discriminations. Even simple perception, the text suggests, is inescapably conceptual.

It is in later portions of the *Yogācārabhūmi* that the *ālaya-vijñāna* complex is fully articulated in *dharmic* terms, addressing the Abhidharma Problematic described earlier. First, the *Pravṛtti Portion* depicts *ālaya-vijñāna* as a full-fledged *vijñāna* with its own cognitive object and associated (*saṃprayukta*) mental factors (*caitta*), all of which are "subtle" (*sūkṣma*) and "difficult to discern even by the wise ones of the world" ((1.b)B.1). Elaborating on *ālaya-vijñāna*'s "indiscernible" object, the text ((1.b)2) states that *ālaya-vijñāna* arises

> through an outward perception of the stable surrounding world, whose aspects are not clearly delineated (*bahirdhā-aparicchinnākara-sthira-bhājana-vijñapti*)[15] . . . based upon that very *ālaya-vijñāna* which has inner appropriation as its objective support ((1.b)A.2).

This subtle "outward perception" is possible, in other words, only insofar as *ālaya-vijñāna* itself arises conditioned by its two "inner bases" or "appropriations" (*adhyātmam upādāna*), the material sense faculties and the "predispositions of attachment to the falsely discriminated" (*parikalpita-svabhāvābhiniveśa-vāsanā*). This process is compared "to a burning flame which arises inwardly while it emits light outwardly on the basis of the wick and oil" ((1.b)A.3), that is, on the basis of our embodied cognitive schemas, which include names, concepts, and discriminations. It is telling that the term "base" or "appropriation" (*upādāna*) also means "fuel, supply, substratum by means of which an active process is kept alive or going" (PED 149).

What provides the "fuel" to keep *ālaya-vijñāna* going is, as before, its relationship with the six *pravṛtti-vijñāna*s and their associated activities, which the *Pravṛtti Portion* explicitly portrays as continuous, simultaneous (*sahabhava*), and reciprocally conditioning (*anyonya-pratyayatā*). This is illustrated metaphorically by waves in a stream. While the ongoing stream of *ālaya* consciousness supports the "waves" of surface perceptual consciousness – insofar as it both continuously "appropriates" the underlying physical and mental cognitive structures as well as "embraces" the seeds, the causal potential, for future arising of perceptual consciousness – so, too, do the surface waves of perceptual consciousness incessantly effect this underlying stream of sentience, this *ālaya-vijñāna*, inasmuch as each wave is always both integral to and a transformation of the stream itself. Put in terms of the Yogācārins' other preferred metaphor, just as the seeds of past karma are constantly coming into fruition in the form of mental processes that occur in nearly every moment, such as perceptual consciousness and feeling – so too does one's intentional actions constantly infuse seeds and impressions (*vāsanā–paribhavita*) into *ālaya-vijñāna* insofar as intentions (*cetanā*), the criteria for actions to be karmic, also occur in nearly every moment of mind. This is the import, and these are the images, of the new Yogācāra model of mind, portraying an intrapsychic dynamism between two inseparable, yet separately conceptualized,[16] aspects of mind in which the whole is greater than its parts.

This model of *ālaya-vijñāna* is fully compatible with the spirit, and the terminology, of contemporaneous Indian Buddhist analyses of consciousness. It is neither an agent nor a faculty, much less an "*ātman* in disguise." It represents, rather, a conceptual rubric within which various continuous yet clearly subliminal processes – such as bodily awareness, subliminal perception, and the influences of language – are categorically subsumed. This is clearly not a singular entity. As the *Pravṛtti Portion* warns, "*ālaya-vijñāna* is momentary regarding its object, and even though it arises continuously in a stream of instants, it is not singular (*na ekatva*; *gcig pa nyid ni ma yin no*)" ((1.b)B.3). We ought not substantialize it.[17]

### *The affliction of "I am" revisited*

But, of course, this is exactly what we are wont to do.[18] Since *ālaya-vijñāna* has the most continuity and consistency of any of our mental processes,[19] and is most

closely associated with our embodied existence, our persisting dispositions and their continuing karmic potentialities – that is, our physical experience, emotional traits, and personal histories – it is precisely *ālaya-vijñāna* that we most identify with, that we most consider our "selves." Thus, the Yogācārins posited a specific kind of "mentation" (*manas*), one

> whose mode is conceiving (*manyanā*) "I-making" (*ahaṃkāra*) [and] the conceit "I am" (*asmimāna*), [which] always arises and functions simultaneously with *ālaya-vijñāna* . . . taking *ālaya-vijñāna* as an object, conceiving [it] as "I am [this]" (*asmīti*) and "[this is] I" (*aham iti*).
> ((4.b) A.1.(a))

This sense of "I am," we remember, remained even in "a noble disciple" (*ariyasāvaka*) until far along the path, and its lingering presence persistently vexed Abhidharma theory. Yogācārins approached this problem much as they did the accumulation of karmic potential and the continuing, "samsaric" aspects of *vijñāna*: by conceptualizing a distinct, continuous,[20] and subliminal stream of afflictive dispositions (*manas*) which are karmically neutral and may thus occur simultaneously with, but not contradictory to, supraliminal processes of various kinds:

> Know that until it is completely destroyed [this mentation] is always associated with the four afflictions that by nature arise innately (*sahaja*) and simultaneously: a view of self-existence (*satkāyadṛṣṭi*), the conceit "I am" (*asmimāna*), self-love (*ātmasneha*), and ignorance (*avidyā*) . . . These afflictions arise without impeding (*avirodha*) the [karmic quality] of skillfulness, etc.
> ((4.b)B.4)

This will be christened "afflictive mentation" (*kliṣṭa-manas*) in Asanga's *Mahāyāna-saṃgraha* and thereafter considered a seventh form of consciousness, with *ālaya-vijñāna* as the eighth.

But latent dispositions are just that: latent. In order to perpetuate cyclic existence they must be rendered into afflictive activity. This occurs through mental cognitive consciousness (*mano-vijñāna*), which, insofar as now arises moment-to-moment "based upon [afflicted] mentation," is "not freed from the bondage of perception in regard to phenomena (*nimitta*)" ((4.b)A.2). That is, as long as our mental perceptual consciousness is accompanied by the deep-seated, subliminal ignorance, self-love, the conceit "I am," etc., signified by *manas*, then we will never cease seeing phenomena in terms of self and other,[21] inviting all the maleficent and misguided actions such self-centeredness supports. And this, Yogācārins concur, persists even in Arhats who have attained the Path of Seeing.[22]

With the addition of affliction mentation (*kliṣṭa-manas*), the Yogācārins realized a radically new model of mind in Indian Buddhism in which subliminal cognitive,

affective, even afflictive, processes interact with and mutually reinforce supraliminal processes. Together, they construct our experience of the world (*loka*), which is ordinarily inseparable from its multiple supporting conditions – for consciousness arises moment-to-moment in relation to cognitive objects, simultaneously based upon our embodied faculties, informed[23] by subliminal linguistic and affective dispositions, and colored by an ingrained self-centeredness.

All this, however, serves to more fully describe the problem – the perpetuation of samsaric existence through habitual activities informed by selfishness and ignorance, etc. – or, rather, *trans*cribe it into subliminal reaches where it is appears even more intractable. How then can we ever find a way out?

## *Eliminating* Ālaya-vijñāna

Since in this Yogācāra view *ālaya-vijñāna* is intimately associated with the conditions that contour our experienced world, it is considered both "the root of all that is defiled" (*saṃkleśa-mūla*) ((5.b)A.5) and "the constituent element (*dhātu*) of all kinds of karmic formations (*saṃskārā*)" ((5.b)C.1). As such, *ālaya-vijñāna* must be abandoned (*prahīṇa*) through the "cultivation of wisdom (*jñāna*) which takes true reality (*tathatā*) as its object" (ibid.), a gradual process of "transforming the basis" (*āśraya-parāvṛtti*).

But given the insidious influence of this "unconscious construction of reality," how could we ever come to see "true" reality? And what would mind be after *ālaya-vijñāna* is abandoned?

These questions were addressed in Asanga's *Mahāyāna-saṃgraha* (MSg). Although *ālaya-vijñāna* had heretofore been couched in Abhidharmic terms, befitting a concept addressing Abhidharmic problems, MSg introduced distinctively Mahāyāna perspectives, fundamentally changing the framework, and thus the import, of the concept.

The mind (*citta*) that has *tathatā* as an object is not an ordinary, mundane mind, based on bias and obscured by ignorance, nor is its object this-worldly. Rather, MSg. I.45 calls it a supramundane *citta* that "arises from the seeds of the impression of hearing [the Buddha's teaching] which issue from the perfectly pure *Dharma-dhātu* (*suviśuddha-dharma-dhātu-niśyanda-śruta-vāsanā-bīja*)."[24] These seeds for supramundane insight into reality can exist within *ālaya-vijñāna* "like milk and water" (MSg. I.46), because, though it is the "root of all defilements," it is also a resultant consciousness (*vipāka-vijñāna*), a karmically neutral (*avyākṛta*) medium capable of "embracing" seeds of all kinds. By strengthening these impressions through hearing, contemplation, and meditative practice (*śruta-cinta-bhāvanā*), one gradually counteracts (*pratipakṣa*) the contents of *ālaya-vijñāna*, eventually eliminating it "in all aspects"[25] until, thoroughly "seedless" (MSg. I.48), only the "transformed basis" remains in its stead.

Since *ālaya-vijñāna* serves as "the constituent element (*dhātu*) of all kinds of karmic formations," and yet still carries the seeds of its own destruction, it is the

common "element" connecting both bondage and liberation, as expressed in this famous verse from the *Mahāyāna-abhidharma-sūtra*:

> The element (*dhātu*) since beginningless time is the common support of all dharmas;
> As this exists, so do all the destinies as well as the realization of Nirvana.[26]

### Ālaya *beyond Yogācāra*

Two interrelated questions remain, raised but not resolved in classical Yogācāra: If *ālaya-vijñāna* is the "the common support of all dharmas," the basis or ground upon which the phenomenal world appears, what remains after it is abandoned? And what is the relation between its originally defiled and its subsequently purified state, that is, what, if anything, connects them?

Recall the idea of original purity found in early Buddhism. The Buddha proclaimed that "this mind (*citta*), O monk, is luminous (*pabhassaram*), but is defiled by adventitious defilements (*āgantuka*)" (AN.1.10), qualities preserved in Yogācāra sources which speak of "a *citta* that is pure and luminous in its original nature (*prakṛti-prabhāsvara-citta*)" but whose faults are "adventitious," extraneous, added on (MSA XIII, 19; MAVBh. I. 22. c–d).[27] This perspective was developed by the third to fourth century CE *Laṅkāvatāra Sūtra*, which adamantly identified *ālaya-vijñāna* with the perfectly pure *tathāgata-garbha*, the "womb" or "matrix" of the *Tathāgata* – despite the fact that they are nowhere equated in classical Yogācāra treatises. Moreover, this *Sūtra* characterizes *ālaya-vijñāna* as "subsist[ing] uninterruptedly, *quite free from the fault of impermanence* . . . thoroughly pure in its essential nature" (Suzuki 1932, 190 [220]) – despite the fact that it is considered momentary, associated with the seven evolving consciousnesses (*pravṛtti-vijñana*), and "the very root of the defilements" (*saṃkleśa-mūla*). The *Sūtra* handles these discrepancies hermeneutically: the teaching that "*Ālaya-vijñāna* evolves together with the seven *Vijñāna*s . . . is meant for the Śrāvakas [Disciples], who are not free from attachment," whereas the equation of *tathāćgata-garbha* with *ālaya-vijñāna* is "meant for those Bodhisattva-Mahāsattvas who . . . are endowed with subtle, fine, penetrating thought-power" (192 f.). As Wayman (Wayman and Hideko 1974) rightly points out, this radically alters the original conception of *ālaya-vijñāna*.[28]

A different approach, one preserving the integrity of *ālaya*'s corruption, was taken by the sixth-century Indian translator, Paramārtha, who preserved *ālaya-vijñāna* as a defiled eighth consciousness that is eliminated upon awakening, and proffered the "transformed basis" as a ninth, "undefiled consciousness" (*amala-vijñāna*) that persists after *ālaya-vijñāna* ceases.

These tendencies are combined in some Tibetan schools, who, extrapolating upon Indian Yogācāra models, posited a primordial *ālaya* wisdom (*ālaya-jñāna*; *kun gzhi ye shes*) that is prior to and apart from defiled and discursive forms of *ālaya* consciousness, of which it is nevertheless the basis. This is the topic of our next major section.

## *Ālaya* in the great perfection

*Philosophical Vajrayāna* One of the most interesting aspects of the historical development of Tibetan Buddhism is the way in which esoteric ritual, lexicons, motifs, and iconography drawn from Indian Buddhist tantra were utilized to shape an innovative and loosely coordinated philosophical movement. In India, Buddhist esotericism – the "adamantine vehicle" (*vajrayāna*) – tended to be focused elsewhere than philosophy per se. Its new terminology and ideas were encoded instead in the often radically distinct ritual and yogic systems, elaborate iconographic programs, cosmological narratives, behavioral codes and ethics, and narrative literature in the form of lineal accounts and hagiographies. Thus while Buddhist tantra in India was characterized by striking innovation and radical discontinuity with previous Buddhist norms, its ideological shifts and discursive transformations did not predominantly take the shape of distinctive philosophical discourses and systems. As non-institutional forms of Buddhist tantra emerged in the eighth and ninth centuries with the radical agendas of the yoginī tantras, they were rapidly domesticated back into the institutional and scholastic milieu of Buddhist monasteries. This process of domestication involved a process of coding Buddhist scholastic values and concepts back into the shocking rhetoric and imagery of these tantras, interpreting the radical behavioral calls as either metaphorical or as references to inner yogic processes. Monastic discourse systematically divorced esoteric traditions from the need to actually alter individual or communal social forms and practices. They tended to accomplish this by viewing esoteric movements as primarily about practice rather than theory, and treating esoteric practices as purely internal and yogic rather than social in character. Thus not only did these new religious forms not alter the social life of the institution or its individuals, but it also could be claimed to have left unaltered the fundamental intellectual forms and traditions that had preceded them – namely Mahāyāna scholastic traditions and their predecessors.

Throughout the efflorescence of Indian tantra from the sixth through eleventh centuries, philosophical discourse and exchange in Buddhist circles continued to be dominated by the nomenclature, concepts, and discourses transmitted under the rubrics of Abhidharma, Yogācāra, Madhyamaka, and Prajñāpāramitā. The greatest impact on such areas instead stemmed from the rise of Pramāṇa, that is, Buddhist logic and epistemology, which exerted an increasingly strong influence on the form and character of Buddhist philosophical discourse. Assimilation of tantric traditions into Buddhist philosophy was limited to fairly sterile discursive maps where anomalous or innovative elements of tantric discourse were explained away by monastic exegetes through identifying them with conventional philosophical notions from non-esoteric discourse. When one examines the philosophical discourses themselves, one finds relatively sparse citation of tantric literature, practices or ideas per se. The famed Kālacakra Tantra (late tenth to early eleventh centuries) stands out as an exception, as it does in so much else. Appearing as one of the last great products of Indian Buddhist intellectual and

literary civilization, its esoteric agenda is distinguished by a remarkably systematic approach which attempts to reassess the entire history of Buddhism, indeed in many ways Indian religions overall, within its own discursive boundaries. Whether this might have been the beginnings of a new era in Buddhist tantric thought and philosophical discourse in India is a historically moot point, since the decline of Buddhist thought, literature, and philosophical innovation was rapid from the eleventh century onwards in India. Thus despite the innovations and influential nature of tantra in India, and its plethora of new motifs and new models of consciousness, Vajrayāna in India never emerged as an important philosophical vehicle, and its influence on mainstream Buddhist philosophy was generally limited, at least in terms of explicit acknowledgment.

In Tibet, however, a brilliant renaissance of Buddhism began around the same time as the final flowering of Buddhist India, driven by a massive importation of literature, practices, and ideas from India across the Himalayas. Uniquely for Buddhist Asia, Tibetans imported and actively developed the full spectrum of tantric traditions from their early roots in the ritual life of Mahāyāna through their radicalization in yoginī tantras to their final systematization within the Kālacakra literature. One of the most interesting aspects of this was the emergence of esoteric Buddhism as a vehicle for vital philosophical discourses and innovations. From the eleventh to fourteenth, a series of thinkers and traditions in Tibet pursued central philosophical issues in a systematic and rigorous fashion within a specifically esoteric discursive terrain. Working within different evolving sectarian configurations across a huge geographical area, and often in quite marked disagreement, these thinkers developed a profoundly philosophical transformation of tantra that included distinctive positions on most of the great Buddhist philosophical motifs – consciousness, emptiness, purity, the nature of the path, the relationship between saṃsāra and nirvāṇa, and perception. This new philosophical literature at times was purely tantric in its citations and frame of reference, while at other times explicitly integrative through detailed references to exoteric literature and debates. While much of it in form explored the boundary between poetry and philosophy, other texts were formally characterized by the evolving norms of Tibetan scholastic literature, including syllogistic argumentation.

During the same time period in Tibet we witness an explosive growth of exoteric philosophical discourse which makes no reference to tantric motifs, including the rise of a Pramāṇa movement, the dominant Prāsaṅgigka strand of Madhyamaka thought, extensive writings on Yogācāra and Prajñāpāramitā literature, and in general a thriving scholastic industry that covered the full range of Indian Buddhist literature, thought, and practice. Large bodies of Tibetan literature evolved that deal with the respective definitions and interrelations between "sūtra" and "tantra," often in a general context, and at times in specialized topical treatments such as ethics and behavior – "the three vows" (*sdom gsum*) texts – or issues of path structure – the "stages of the path" (*lam rim*) and related types of texts. There gradually emerged a general polarization into two

broad trajectories: one which tended to keep these two discourse realms separate by treating tantra as innovative in "practice" but consonant with traditional exoteric "view" (philosophy and experiential realization); and one which tended to see these discourses as interpenetrating, and understood tantra to be profoundly philosophical and even superior to traditional exoteric intellectual discourses. Modern international scholarship has yet to adequately deal with this complexity, often continuing sectarian bifurcations in their tendency to deal with "philosophical" issues by looking exclusively at Mahāyāna philosophical discourse in traditional lines of Pramāṇa, Mahdhyamaka, and Yogācāra.

Some of the most innovative of these tantric movements were those loosely affiliated lineages that shared the rubric of the Great Perfection (*rdzogs chen*, pr. *dzokchen*), found especially within the Bön (*bon*) and Nyingma (*rnying ma*) traditions. The Great Perfection, along with the Great Seal (*phyag chen*, S: *mahāmudrā*) traditions, formed a particularly interesting set of movements that were often intensely philosophical, but were also involved in contentious relationships with mainstream Vajrayāna. Claiming to transcend other Vajrayāna traditions, they were critical of tantra's complex ritualism and rhetoric of subjugation. Based on notions of pure awareness and the primacy of gnosis termed "primordial cognition" (*ye shes*, S: *jñāna*), these traditions ranged over a broad variety of exoteric and esoteric themes and problems. However, they had a particular interest in models of purity and consciousness found in Buddha-nature literature and Yogācāra scholastic thought. We thus find in these texts models and terminology clearly derived from those Mahāyāna literary corpuses, but often in quite different forms and unprecedented constellations with other doctrines and practices.

### *"Fundamental consciousness" in the Great Perfection*

One such reinterpretation of Yogācāra doctrines is the central role played within the Great Perfection by the notion of a "fundamental consciousness," literally in Tibetan "universal ground consciousness" (*kun gzhi rnam par shes pa*, S: *ālaya-vijñāna*). Whereas many Tibetan authors addressed this notion in conservative, exoteric discourse which continued the form and content of Indian discussions in repetitive and innovative ways, authors in the Great Perfection were more innovative in their treatment of the concept, though often continuing and relying on standard Yogācāra nomenclature and motifs as well. At this stage in our scholarship of Tibetan thought, vast bodies of literature remain inaccessible, unedited, unanalyzed, and untranslated, while synthetic and detailed analysis of specific lineages and themes remain scarce during this earlier period. Thus I will contribute to an understanding of the Tibetan tantric development of the notion of fundamental consciousness by summarizing its role within the corpus of Longchenpa (*klong chen pa*, 1308–1363), one of the greatest philosophical figures in the history of Tibet and the most important scholar within the Seminal Heart (*snying thig*) variety of the Great Perfection.

The obvious point of departure is the literature's stock contrast between the "universal ground" and the "Reality Body" (*chos sku*, S: *dharmakāya*), which is linked to other such dyads: ordinary "mind" (*sems*, S: *citta*) and "primordial cognition"; "mind" and "awareness" (*rig pa*, S: *vidyā*); and, less often, "psyche" (*yid*, S: *manas*) and "insight" (*shes rab*, S: *prajñā*). While these four pairs are not synonymous, they all use contrasting models of consciousness and perception to articulate the basic Buddhist dualism of saṃsāra and nirvāṇa, suffering sentient beings and liberated Buddhas, impurity and purity. We will focus on the relationship of the first two pairs: the universal ground and Reality Body form the basis for the operations and configuration of the mind and primordial cognition, respectively. The ordinary mind is the constellation of cognitive and emotive acts based upon the universal ground's unconscious substratum within ordinary beings, while primordial cognition is the constellation of cognitive and emotive acts based upon the Reality Body's non-manifest substratum in enlightened Buddhas. The mind and universal ground are thus impure, dualistic, fragmenting, and emotionally poisoned, while pristine cognition and the Reality Body are pure, non-dual, holistic, and emotionally healthy. It is a distinction between distorted and optimal experience, as well as the corresponding unconscious matrices. More typically, the focus is on the ordinary mind (*sems*) or ordinary consciousness (*rnam shes*) contrasted to pure awareness (*rig pa*) or primordial cognition (*ye shes*). The discussions are straightforward in terms of buddhology – namely, models of consciousness for Buddhas in contrast to sentient beings, or, in epistemological terms, the contrast of global, holistic, and reflexive modes of awareness to foeval, dualistic, and non-reflexive modes of awareness.

These discussions form a stock element of Great Perfection literature whether in the form of short essays such as Longchenpa's (1973a) *Precepts on Examining Mind and Primordial Gnosis* or Rangjung Dorjé's (*rang byung rdo rje*, 1284–1339) *A Treatise on the Differentiation of Consciousness and Primordial Cognition*,[29] or in standard sections of larger texts such as chapter four in Longchenpa's (1983c) *The Treasury of Words and Meanings*. The form generally has a relatively recognizable Mahāyāna-based structure, even if the overall agenda is distinctive. *Precepts on Examining Mind and Primordial Gnosis* (Longchenpa 1973a) focuses on mind and primordial cognition rather than the universal ground, and is only slightly esoteric; indeed, even the treatment in *The Treasury* (Longchenpa 1983c) a masterly summary of Seminal Heart esotericism, is mostly in and of itself fairly recognizable in an Indian exoteric context.

Longchenpa presents the universal ground in a distinctive fourfold formulation: the primordial universal ground (*ye don gyi kun gzhi*), the linking universal ground (*sbyor ba don gyi kun gzhi*), the universal ground of varied karmic propensities (*bags sna tshogs pa'i kun gzhi*), and the universal ground of the karmic propensities(-derived) body (*bag chags lus kyi kun gzhi*). This discussion provides an excellent depiction of the functional diversity of the concept in the Great Perfection as summarized in *The Treasury of Words and Meanings* (Longchenpa 1983c, 234.6–235.1).

1 "The primordial universal ground" is the dimension that primordially from the very first innately arises upon awareness, like gold and tarnish; it is the non-awareness itself dependent upon awareness, and which serves as the initial foundation of all phenomena in cyclic existence.
2 "The linking universal ground" is the foundation of karmic factors, the morally indeterminate fundamental basis which individually links and impels us to either cyclic existence or transcendent reality (via our particular) karmic actions.
3 "The universal ground of varied karmic propensities" is the morally indeterminate dimension of the diverse latent karma which perpetuates the vicious cycle of our ordinary mind and its specific operations.
4 "The universal ground of the karmic propensities(-derived) body" is the base of non-awareness serving as the foundation for the respective manifestations of the following three types of bodies: a coarse body manifest in parts formed from atomic particles (i.e. the major limbs and their secondary appendages); a lucent body of light; and a body manifesting in accordance with one's deep contemplation.

This quartet outlines cosmogonic, cosmological/existential, psychological, and somatic functions of fundamental consciousness as four devolutionary phases (the following cites alternative formulations by Longchenpa 1983b, vol. 2, 35. 6–36.6). (i) The primordial universal ground refers to a primordial ground's own cognitive energy failing to self-recognize itself, such that this "non-awareness" operates as the transcendental condition for the entirety of cyclic existence. It is thus "the original stirring of cognitive processing being in conjunction with non-awareness." (ii) The linking universal ground indicates how this cognitive energy's deepest substratum operates as the unifying karmic mechanism linking, and impelling, personal continuity across many lifetimes and experiential worlds. The two broadest types of life-worlds are saṃsāra and nirvāṇa: "that psychic energy links to cyclic existence if is not self-aware, while it links-up to transcendence if it is aware." Longchenpa elsewhere correlates the universal ground of primordial presence to "indeterminate non-awareness," and the linking universal ground to our eightfold ordinary consciousness (the six perceptual consciousnesses, integrative psychic consciousness, and universal ground consciousness) (Longchenpa 1971b, vol. 1, 446.4ff.). (iii) The universal ground of varied karmic propensities operates as a repository for the network of psychic seed-potencies and karmic propensities that constantly influence our specific mental states, emotions, and modes of consciousness below the level of consciousness. Thus "this psychic energy functions as the exclusive foundation-source for all the impure karmic actions and propensities." (iv) The universal ground of our karmic propensities-derived body signifies how its karmic propensities materialize into one of three specific body types with distinctive perceptual apparatus acting as unifying orientational points for our experience of the world. In summary, "this root psychic energy has the

karmic propensities for physical embodiment such that it manifests a flesh and blood, light, or psychic body."

These are four aspects of the single wellspring of all cognitive processes from the primordial emergence of consciousness within the ground's self-contained virtual reality up until the current moment. There is a developmental logic behind the specific sequence – an initial phase which sets the stage, a second phase which bifurcates into one of two broad trajectories of life-worlds, a third phase which is the actual morally infused interactional system sustaining our existence, and a fourth phase where this takes somatic form in one of three types. While these presentations are usually terse, they offer a useful platform to organize the diverse usages of fundamental consciousness, as well as to reflect on its broader contextualization within the Great Perfection. While the structured presentations of the universal ground in its own right are modestly distinctive, the truly innovative reinterpretation is revealed when they are fully contextualized within the wider discourses in which those sections are positioned.

### *Cosmogonic functions: the primordial universal ground*

The primordiality of the universal ground points to its role in beginnings and creation. This is traditionally a problematic topic in Indian Buddhism with its anti-cosmogonic orientation rejecting a model of divine creation or even the topic of a specific temporal onset to the universe. Traditionally we find a "beginningless" ignorance (*ma rig pa*, S: *avidyā*) of saṃsāra stretching into an infinite past, creation impelled by emotionally infused activities (*karma*) and their traces-cum-propensities (*vāsanā*), and the divinity of enlightened Buddhas located on the *other side* of ordinary existence as the result of a long developmental trajectory. Despite this, there are precedents in Indian Buddhism for divine creation in terms of Buddhas creating pure lands and their own enlightened displays classified into "three Bodies" (*skugsum*, S: *trikāya*), as well as the cosmological theme of vast Bodies of Buddhas containing billions of worlds. In addition, the motif of "a nucleus of enlightened movement" (*de bzhin gshegs pa'i snying po*, S: *tathāgatagarbha*) or Buddha-nature within all life points to a possible divinity that logically precedes ordinary existence. In esoteric forms of Indian Buddhism, we find these motifs intensified with the central yogic practice of "creating" (*bskyed*) deities in visualization practices, as well as creating entire divine worlds of beings, residences and grounds known as *maṇḍalas*. We also find Buddha-nature theory deepening with new somatic practices involving the presence of these *maṇḍalas* within the ordinary body, as well as an entire alternative subtle physiology with pure flows of divine energy. Tibetan Buddhists thus inherited a complex array of themes from India regarding creation, divinity, and primordiality.

When we thus regard the universal ground in its "primordial" dimension, it is not surprising that there is tension and ambiguity as to the relative divinity or impurity of this foundational consciousness, as well as its role in beginnings – whether of time, life, saṃsāra, or nirvāṇa. A reoccurring question concerns its

relationship to ignorance/non-awareness on the one hand, and Buddha-nature on the other hand. Non-awareness is the grand progenitor and transcendental condition of saṃsāra, and is the first of the twelve links of interdependent origination describing the formation and persistence of saṃsāra, an early Buddhist existential and psychological diagnosis of the problem of existence. Such accounts were early on explicitly denied a cosmogonic cast, as non-awareness is described as without beginning. On the other hand, Buddha-nature emerges in some Mahāyāna discourses as the ultimate matrix and source of nirvāṇa, though important controversies swirled about whether to construe this as a passive potential for development, or as a more radical notion of a divine agent working from within ordinary being toward self-expression. The positing of a foundational consciousness, whatever the factors and motivations driving its original formulators, naturally raises the issue of its relationship to the formation of saṃsāra and nirvāṇa, to impurity and purity, to ordinary being and enlightened being.

*The Treasury of Words and Meanings* (Longchenpa 1983c, chapter 2, 187.3–188.5) strictly defines the universal ground in all four aspects as exclusively the impure substratum of saṃsāra. Indeed, the entire rationale for the discussion is to draw a strict and rigid demarcation between "universal ground" and "Reality Body" as the ongoing matrices of saṃsāra and nirvāṇa, respectively. Its first "primordial" dimension of fundamental consciousness is thus identified with the ancient Buddhist concept of ignorance. In the Great Perfection, ignorance or non-awareness is classified as having three primary aspects keyed to the sequential unfolding of ordinary existence (Longchenpa 1983c, chapter 2, 187.3–188.5): (i) single identity non-awareness (*rgyu bdag nyid gcig pa'i ma rig pa*), (ii) coemergent non-awareness (*lhan cig skyes pa'i ma rig pa*), and (iii) non-awareness of rampant reification (*kun brtags pa'i ma rig pa*). Longchenpa further details an accompanying "four conditions" (*rkyen bzhi*) derived from normative Buddhist epistemology which are necessary for a perception to take place. In a broad manner, it is possible to correlate the "single identity non-awareness" with the "universal ground of primordial presence," "coemergent non-awareness" with the "linking universal ground," and the "non-awareness of rampant reification" with the universal ground's final two aspects dealing with the network of karmic propensities.[30] Elsewhere, in his analysis of the twelve links of interdependent origination, Longchenpa describes the first link of "non-awareness" as "non-recognition (of appearances) as self-presencing," the second link of "karmic conditioning" as stemming from "the non-awareness of rampant reification" clinging and fixating on objects, and the third link of "perceptual consciousness" as deriving from the universal ground, which is "awareness adulterated with karmic propensities" (Longchenpa 1971b, vol. 2, 175.3ff.). However, the discourse on non-awareness is chiefly epistemological and ideational in orientation, though applied equally to a cosmogonic *and* individual psychological scenario in describing the rise of distorted perception and thought processes. In contrast, the discussion of the foundational consciousness is intended to explain the working system of consciousness, including a plurality of processes operating at unconscious levels,

and embracing its role in emotions, embodiment, morality, and action. Both thus function to explain the inception, character and operations of consciousness within saṃsāra, yet diverge in terms of explanatory agendas therein.

The relationship of foundational consciousness and non-awareness is thus clear in these terms – non-awareness undergrids the very possibility of samsaric existence, and the foundational consciousness attempts to provide a model for how that basic lack of awareness can serve as a working basis for other emotions, cognitive acts, and personal continuity over many lifetimes. The other three dimensions of the universal ground are a natural extension offering details on how this unconscious substratum determines the health of one's life world, shapes emotional and cognitive details across time, and constitutes one's bodily structure. It does this primarily through acting as a repository for the trace impressions of past and present activities and emotions, and then furthermore acting as the operational basis for those trace impressions to subsequently ripen into active proclivities influencing present and future cognition, emotion, and activity. Yet how do these fundamental layers of unconscious processes relate to other unconscious dimensions in human beings described as divine, yet in ordinary existence equally far removed from introspection, reflexive awareness, and deliberate intention?

In order to assess this question, we must examine the standard Great Perfection distinction between the terms "universal ground" (*kun gzhi*; *ālaya*) and the "universal ground consciousness" (*kun gzhi'i rnam shes*; *ālayavijñāna*), a distinction Longchenpa locates in Indian Yogācāra literature. He cites a *Bodhisattvabhūmi* passage which defines the "universal ground" as "non-conceptuality uninvolved with objects" and the "universal ground consciousness" as "non-conceptuality involved with objects" (Longchenpa 1973b, vol. 1, 85b.2). He also cites Sthiramati's commentary to the *Mahāyāna-sūtrālaṅkāra*, where he characterizes the "universal ground" as the overall basis for the accumulation of karma in the manner of their house, while the "universal ground consciousness" is that which "opens up the space . . . for the increase, amassing, decline, and so on of these karmic forces" (84.5). Longchenpa himself describes the universal ground consciousness as the "unceasing brightness and clarity" of the universal ground's radiation, such that the former signifies how the latter diffuses outwards to operate as the other seven aspects of typical consciousness-activity (Longchenpa 1971a, vol. 3, 120.1ff.). This subtle distinction, however, is of exceptional importance when one considers its broader discursive context within the *Seminal Heart's* central interest in cosmogony and divine creation stemming from primordial cognition. The tradition posits an original, divine ground termed "the ground of all" (*kun gyi gzhi ma*), which in its contracted form leads us back to a "universal ground" (*kun gzhi*). This results in a fundamental ambiguity that extends throughout the system, namely whether "ground of all" with its cosmogonic primordiality signifies all of saṃsāra and nirvāṇa, or simply all of saṃsāra. Despite Longchenpa's following the latter interpretative trajectory in *The Treasury of Words and Meanings* (Longchenpa 1983c), the term "primordial"

(*ye, ye don*) typically signifies the transcendent dimension of a Buddha and nirvāṇa, whether referring to a Buddha's knowledge as "primordial knowing" (*ye shes*) or describing the cosmogonic base as a "primordial ground" (*ye gzhi*). Indeed, Longchenpa's own corpus elsewhere explicitly uses the term "universal ground" to signify the innately pure primordial ground of all reality (Longchenpa 1983d, 89.7).

This divine ground is explicitly identified as "a nucleus of enlightened movement" (*de bzhin gshegs pa*, S: *tathāgatagarbha*) or Buddha-nature. While presented as a cosmogonic ground which ontologically precedes cyclic existence (*saṃsāra*) *and* transcendence (*nirvāṇa*), it is also explicitly located within the human interior as an ongoing, deeply unconscious dimension. This dimension is engaged in a constant efflorescence that gives rise to both saṃsāra and nirvāṇa, leading to the stock formulation of a single ontological ground leading to two paths, that is, interpretative trajectories resulting in a bifurcation of life-worlds. The ground itself is described as threefold – empty essence, radiant nature, and all-pervasive compassion – in a model explicitly based upon a Buddha's three Bodies: the empty Reality Body (*dharmakāya*), the radiant Enjoyment Body (*sambhogakāya*), and the all-pervasive Emanational Body (*nirmāṇakāya*). The cosmogonic movement from the ground's deep interiority and potential into manifestation is modeled after the description of the divine creation of pure lands, a process bound up with the emergence of Enjoyment Bodies and their *maṇḍala*s out of the non-manifest matrix of the Reality Body. The completely interior and pure "ground" is described as undergoing a process of exteriorization and rupture resulting in this scenario, from which two paths (*lam*) extend: a path leading to enlightened transcendence (*nirvāṇa*) by means of the cognitive capacity recognizing the appearances as self, and a path leading to distorted cyclic existence (*saṃsāra*) by means of a lack of such recognition. The former path is described as the mode of freedom (*grol tshul*) of the primordial Buddha All Good (*kun tu bzang po*, S: *samantabhadra*), while the latter path is described as the mode of deviation (*'khrul tshul*) of sentient beings (*sems can*, S: *sattva*). Furthermore, the latter path is termed "non-awareness," which is here identified as the "primordial universal ground," that is, the basic unconscious matrix for animate life in saṃsāra.

The inception of saṃsāra and nirvāṇa is thus described as emerging in a bifurcated epistemological scenario in which an emergent cognitive capacity (*shes pa*, S: *vijñāna*) develops out of a deeply unconscious state to newly encounter a lighting-up or appearances (*snang ba*). The bifurcation hinges on what is termed "recognition," namely the reflexivity involved in this process of manifestation. In the case of transcendence, the interior and unconscious ground now infused with reflexive self-awareness becomes the Reality Body, the matrix of a divine creativity constituting the Buddha's prolific forms and activity. In the case of deviation, the ground remains, albeit in a state of deep unconscious latency, while a derivative cognitive formation termed the "universal ground consciousness" becomes the operational matrix of a distorted and tainted creativity

constituting a sentient being's embodiment and activities. In other words, Buddha-nature is the cosmogonic ground, and the Reality Body is its transformation with reflexive self-awareness, while the universal ground consciousness is a derivative unconscious matrix embedded within the even more deeply unconscious pure ground. In this manner, the relationship of the Buddha-nature/Reality Body and fundamental consciousness – wisdom and ignorance – is between two distinct unconscious domains in the body and mind that account for creation and agency beneath conscious reflection. The universal ground literally dissolves into the always already extant Buddha-nature, which then becomes an awakened Buddha. Thus foundational consciousness does *not* transform into a new type of unconscious process or cognitive constellation, but rather dissipates so that deeper movements can emerge into being, perception and emotions directly outside of its meditating and distorting influences.

### *Cosmological and existential functions: the linking universal ground*

The foundational consciousness's "linking" function ensures unconscious continuity of personal trajectories in either distorted (i.e. *saṃsāra*) or optimal (i.e. *nirvāṇa*) worlds of experience and being. Each straying sentient being is linked to cyclic existence or transcendence through the universal ground's storing and preserving of karmic potencies as determined by that being's particular actions. It serves to coordinate all of this in a network of karmic traces stretching across individual life-tracks and impelling a given individual from one state of being to another, while in particular tightly "intermeshing" them with cyclic existence in their total physical, verbal, and mental being. *The Treasury of Reality's Expanse* (Longchenpa 1983a, 233.4) defines the linking universal ground as, "[T]he non-awareness operating as the basis for the accumulation of all karmic actions, such that it links us to all aspects of fictive existence (the psycho-physical components, etc.)."

The cosmogonic scenario discussed earlier is interiorized as well, so that a psycho-cosmogonic process unfolds within each individual's interiority throughout its life. The ground of their pure awareness unfolds, there is a lack of recognition and it thus devolves into the universal ground. This forms the matrix for specific perceptual cognitions, emotions, and behaviors, which in turn leave traces back on that ground leading in the future to propensities that ultimately lead one down the path toward saṃsāra or nirvāṇa. Great Perfection psychology thus utilizes the divine cosmogony, and its secondary process of deviation, as the basic model for describing the ongoing functioning of unconscious and conscious processes of each person's being. The unconscious dimensions thus occur in two distinct strata: a more deeply unconscious and ontologically prior matrix known as the "ground," "Buddha-nature," "awareness" (*rig pa*), "self-emerging primordial cognition" (*rang byung ye shes*), or even the Reality Body, *and* a shallower level that is developmentally dependent on the former matrix and known as the

"universal ground (consciousness)" or "single identity non-awareness." The grand drama of the divine explosion followed by ignorance, deviation, and contraction is thus interiorized and existentialized as a daily and unconscious process that constitutes the depth psychology of sentient life.

This cosmological role also entails controversies pertaining to idealism, namely the extent to which foundational consciousness creates and structures the external world. A soft interpretation would be that the foundational consciousness is an unconscious array of dynamic and interdependent predispositions undergridding our patterns of emotions, conceptual projections, perceptual constructions, and even actual physical structures of our body which produce our *actual* life world. However, the literature clearly indicates that controversies over the idealistic implications of the theory were pervasive, namely, the stronger interpretation that foundational consciousness actually creates the external world and its appearances. This is a natural extension of older theories of the power of human action – karma – to literally create worlds, including relatively terse references to how karma can work in a coordinated fashion across communities and species. Since the foundational consciousness is essentially a way to account for the dynamic operations of karma beneath the level of consciousness and across lives, the role of human agency in the creation of the world is an inescapable issue. However, this creative agency becomes more personalized, focused on cognition rather than action, and systematized to a greater degree. Longchenpa explicitly rejects solipsistic idealism, namely the notion that ordinary "mind" or foundational consciousness creates the external world in which individuals find themselves, though the actual quality of that world is profoundly altered through our cognitive engagement with it. Thus the experience of material elements in their qualitative experience may well be a result of the foundational consciousness and its karmic propensities, but their essential energy as dynamic configurations of light remain outside of individual subject's influence, while even their experiential character is a product of dynamic interaction between multiple beings. On the other hand, Longchenpa's work is pervaded by evocative depictions of the creative function of consciousness *vis-à-vis* the world in terms of pristine cognition, the Reality Body and Buddha-nature, as indicated in the tradition's divine cosmogony. In fact, the ancient Buddhist notion of interdependent origination, a process of cause and effect driven by human action (*karma*), has been displaced by the model of a magical web (*sgyu 'phrul drwa ba*), a process of complex causality transcending linearity driven by pristine cognition (*jñāna*). Thus the human unconscious leads, at its deepest levels, to a cognitive network that is understood to form a concealed, secret array of continuities driven by what is believed to be a fundamentally intelligent and divine dynamic. One of the consequences of this is a valorization of unconscious processes deeply linked to imagination, somatic processes, and non-conceptual experiences. This is a topic to which we will return in the following section in regard to contemplation.

### *Psychological functions: the universal ground of varied karmic propensities*

The foundational consciousness's third aspect is the actual network of karmic propensities, namely the impressions left on the psychic substratum by physical, verbal, and mental actions (*karma*). Each action's conscious and unconscious motivation shapes one's ongoing existence by leaving corresponding seed-potencies in the substratum, which eventually flower into propensities to repeat such types of action in the future. As previous karmic impressions ripen into present emotions and mind-sets, one's current psychological state and action create new impressions, such that a vicious cycle perpetuates itself into the indefinite future. This network of karmic propensities is morally indeterminate in that while it is the effect of morally determinate actions, it is itself a latent, unconscious dimension beyond the personal volition that could be classified with such ethical valuations as "virtuous" or "non-virtuous." It can thus karmically influence one's future, but is not itself an intentional psychic factor capable of generating any new karmic energy. As a whole, this thus accounts for the specific dynamics of personal continuity, behavior, and dynamic interplay of the unconscious and conscious processes in cognitive and emotional life. This aspect is a fairly conventional discussion consonant with earlier Mahāyāna depictions of foundational consciousness accounting for personal continuity.

### *Somatic functions: the universal ground of the karmic propensities-derived body*

Foundational consciousness's fourth function points to its interdependence with embodiment, namely the deeply somatic character of the unconscious. *The Treasury of Reality's Expense* (ibid.) describes the "universal ground-as-body" as the "beginningless karmic propensities for manifestation in terms of a body," which becomes the "basis for the constellation of factors making up our individual bodies." In general, the ordinary body is termed "ripened karmic propensities" (Longchenpa 1983b, vol. 2, 329.6) since it forms via the dynamics of karmic propensities from the moment of conception onwards:

> When the mind, constellation of eight modes of consciousness, and fifty one mental factors manifest along with the karmic propensities, it is termed the "sheath" or "body" of the ripening karmic propensities. Furthermore, they are three in number – the flesh and blood body of the desire realm, the light body ripening in the four meditative states, and the psychic body which is latent in the formless realm.
>
> (Longchenpa 1971a, vol. 3, 202.3)

The three bodies correspond to the three realms of cyclic existence: (i) the flesh and blood corporeal body of the sensual realm, with the major limbs (the two arms,

two legs, and head) and auxiliary appendages (the fingers, toes, chin); (ii) the luminous, etherealized bodies of the form realm corresponding to various levels of deities and rarefied states of meditation; and (iii) the "psychic bodies" of the formless realm, in which existence is attenuated to concentrated psychic energy without material physicality. In the third case, embodiment is limited to a ghost-like existence between lives in the intermediate process (*bar do*), a mere mental image deriving from the karmic propensities of eons of embodied existence. In this way, the lived body can manifest on three different levels, which can be understood as dimensions of experience accessible to us in this life – the coarse physical level enmeshed in material existence, a vibrant subtle body reflexively sensed in contemplation, and the experiential body in various states – dreams, post-death, rarified contemplative states, visions, various imaginative processes, and acts of cognitive modeling. The basic point is that the karmic traces constituting the unconscious dynamics of the foundational consciousness are deeply constitutive of all forms of embodiment:

> Since the karmic propensities for a body are present within the root psychic energy (of the universal ground), the bodies of flesh and blood, light, and the psyche manifest, and hence (this division of the universal ground) is termed (the "universal ground of the karmic propensities-derived body."
>
> (Longchenpa 1983b, vol. 2, 36.2)

This somatic character of the foundational consciousness extends deeply into the body's interior structure and processes, since the cosmogonic drama leading to it is not only interiorized within the consciousness and unconscious processes of sentient life, but is also somatically embedded within the body's physiological detail. Earlier Buddha-nature literature in Mahāyāna was pervaded by evocative metaphors placing divinity (whether potential or actual) within the ordinary body, but details are sparse on how that might actually work. The rise of yogic physiology in yoginī tantras constituted a deeply somatic turn in Buddhist contemplation and discourse that focused on the intimate physiological detail of the human peripersonal space. At times this took the form of an abstract mapping of Buddhist doctrinal concepts and iconographic detail onto the human body, but contemplation also involved genuine attention to ordinarily unconscious physiological processes and intense physical sensations. This somatic discourse entailed that all important concepts had to be embodied in very precise manners.

Thus the heart forming one of the four main "wheels" (S: *cakra*) of Buddhist subtle bodies is the somatic residence of the divine ground of pure awareness. Its cosmogonic luminosity – technically termed the "presencing of the ground" (*gzhi snang*) – spills out from the heart into a series of "luminous channels" (*'od rtsa*) extending throughout the body from a central channel running up the body's torso. As complicated physical and mental human structures evolve based upon it, it remains within the human body's central vitality channel as a radiation of the

heart's radiant light via the network of the latter's luminous channels. The foundational consciousness is understood as deriving from the luminous channels' "brightness" (*gdangs*), and is viewed as "clouds" which obscure the heart's pristine awareness and thus must be cleared away via contemplation. It is located within the "vitality channel" (*srog rtsa*), a term usually specifying the aorta or blood channel trunk, and often associated with the spinal cord (*rgyungs pa*) in these texts (Longchenpa 1971a). In Tibetan medical texts, the aorta is termed the "black vitality channel" and the spinal cord the "white vitality channel," clearly relating to the key role of blood and nervous energy. The luminous channel of transcendence remains located within this vitality channel, such that its somatic reality again reiterates the primacy and primordiality of Buddha-nature in terms of human being, and the secondary and derivative nature of the fundamental consciousness.

In summary, these unconscious processes – both mundane and divine – are deeply intertwined with somatic processes and realities. This entails both that our physical state is a direct function of our relationship to unconscious processes, and that the key to gnosis lies through a somatic engagement rather than a purely cognitive one.

### *Contemplative functions: the gnostic transformation*

These models of the unconscious dimensions of being as well as bifurcated models of creation and agency are clearly manifest in the *Seminal Heart's* contemplative traditions. The contemplative focus on the foundational consciousness is chiefly on its eradication through traditional practices of "calming" (*śamatha*) and insight (*vipaśyanā*). These function to deconstruct the foundational consciousness's sedimented patterns, while also opening up a clearing for the divine ground's effulgence to emerge in the field of reflexive awareness. Similar practices include meditations on the sounds of the elements (wind, water, etc.) through cultivating calming based upon the sound of natural elements, as well as the "differentiation of saṃsāra and nirvāṇa" (*'khor 'das ru shan*) practice in which people act crazily in an isolated valley until pure fatigue exhausts ordinary constructions of experience. This culminates in the breakthrough (*khregs chod*) contemplative praxis, which essentially is a form-free relaxed presence of mind immersed within the depth unconscious of the ground. However, the most distinctive contemplative practices are those focusing on a deeply somatic experience of creative imaginal processes termed "direct transcendence" (*thod rgal*). This core practice involves cultivating a spontaneous flow of images understood to be the effulgent flow of luminosity from the heart's universal ground through the eyes into exterior space. As this ordinarily unconscious process becomes reflexively self-aware, an alternative form of organization and patterning comes to the fore. Hence a dual tracked contemplative model is explicitly geared toward first eradicating the shallower layers of unconscious processes, and second bringing deeper processes into reflexive awareness.

## Conclusion

Explicit models of unconscious mental and physical processes arose within Indian Buddhism in response to the Abhidharma tradition's intensive analysis of consciousness, both in theory and practice. Yogācārin Buddhists subsequently discerned the limits of conscious awareness, and, in the process, the underlying conditions that must necessarily support all ordinary conscious experience. Until this point, the notion of a foundational consciousness (*ālaya-vijñāna*) had largely remained a solution to an Abhidharmic Problematic concerning the relationship between different modalities and functions of consciousness. Once the notion of a foundational consciousness underlying all other forms of mind was fully articulated, however, it became an interpretive nexus inviting speculation on its relationship to other processes outside consciousness awareness and control. These included Buddha-nature and pure consciousness (*amala-vijñāna*), leading increasingly to speculation on older but as of yet poorly developed notions of original purity hidden within ordinary existence. This basic tension – namely whether fundamental consciousness is defiled or pure – came to be further developed in philosophical esoteric movements in Tibet. In at least one such tradition, the Great Perfection, we find a complex new synthesis elaborating both aspects into a deeply somatic portrayal of the unconscious as a dramatic unfolding of radically active divine and distorted processes with contrasting paradigms of creation and causality.

## Notes

1 There are, of course, active cognitive processes, such as apperception, but these are not consciousness.

2 In a famous passage the Buddha specifically denies this "heresy of Sāti": "As I understand the Dhamma taught by the Blessed One, it is this same consciousness that runs and wanders through the round of rebirths, not another." The Buddha responds: "apart from conditions there is no origination of consciousness" (MN.1.258. *aññatara paccayā natthi viññāṇassa sambhavo ti*).

3 Compounded of the prefix "*saṃ*," "with" or "together with," and a form of the verbal root "*kṛ*" "to do or make," *saṃskārā* literally means "put or made together" or simply "formation." In the psychological sense, *saṃskārā* refer to the volitions, dispositions, and actions that constitute human life, both insofar as these are *constructed* complexes formed from past actions and *constructive* activities formative of present and future experience.

4 See Johansson (1979, 106f.), Wijeskera (1964, 254–259).

5 For a longer discussion of this in Buddhist terms see Waldron (2003b).

6 "This body is not yours, nor does it belong to others. It is old kamma, to be seen as generated and fashioned by volition, as something to be felt." The commentary (*aṭṭhakathā*) explains

> *It is old kamma* (*purāṇam idaṃ kammaṃ*): This body is not actually old kamma, but because it is produced by old kamma it is spoken of in terms of its condition. It should be seen *as generated* (*abhisaṅkhata*), in that it is made by conditions; *as fashioned by volition* (*abhisañcetayita*), in that it is based on volition, rooted in volition and *as something to be felt* (*vedaniya*), in that it is a basis for what is to be felt.
>
> (SN 2000, p. 757, n. 111)

7 *Milinda*'s *Questions* (Horner 1963–64, 79f.; I. vii.57) uses this same analogy for the habits and tendencies of mental processes.

8 The definition of disposition suggests both a result of previous actions and the tendency to repeat it: "a person's inherent qualities of mind and character; an inclination or tendency" (*Concise Oxford Dictionary* 1976).

9 MN. 1.8. "It is this self of mine that speaks and feels and experiences here and there the result of good and bad actions; but this self of mine is permanent, everlasting, eternal, not subject to change, and it will endure as long as eternity."

10 AKBh I.3 (Shastri, 14; Pruden, 57). He continues: "So it is with a view to this discernment that the Abhidharma has been, they say, spoken [by the Master.]... without the teaching of the Abhidharma, a disciple would be incapable of discerning the *dharmas*."

11 AKBh *ad* I.2b (Shastri 12: *svalakṣaṇadhāraṇād dharma*). This definition exploits the etymology of *dharma*: "*dhṛ*," "to hold, bear, carry, maintain, preserve, keep, possess, place, fix," etc.

12 There are *ad hoc* categories for anomalous factors such as *saṃskārā*s dissociated from mind (*citta-viprayukta-saṃskārā*), whose very existence belies the claims of *dharmic* discourse. See Jaini (1959b).

13 *Ālaya* is composed of the prefix "*ā*," "near to, towards," with the verbal root, "*lī*," "to cling or press closely, stick or adhere to, settle upon, etc." (SED 154; PED 109).

14 See complete passage in Waldron, *The Coarising of Self and Object*, *Infra*.

15 It is indistinct or "unperceived" (*asaṃvidita*) the *Triṃśikā-bhāṣyam* (TBh 19.14–15) explains, inasmuch as one does not know "it is that, it is here" (*so 'sminn idaṃ tad iti pratisaṃvedanākāreṇāsaṃvidita ityatas tad asaṃviditakopādi iti ucyate*). See also Schmithausen (1987, 389f.).

16 These are two simultaneous, yet conceptually distinct forms of consciousness (ASBh 12.15: *dvayoḥ vijñānayoḥ yugapatpravṛtti bhaviṣyati*).

17 Freudian theorists faced the same challenge with its concepts: "Just because the [ego, id, and superego] have different names does not mean that they are separate entities... They are merely a shorthand way of designating different processes, functions, mechanisms, and dynamisms within the total personality" (Hall 1954, 34f.).

18 As *Saṃdhinirmocana Sūtra* V.7 explained, the Buddha has "not taught [*ālaya-vijñāna*] to the ignorant, lest they should imagine it a self."

19 It's "perception (*vijñapti*) arises," according to the text, "with a single flavor (*ekarasatvena*) from the first moment of appropriation [of the body at conception] for as long as life lasts" ((1.b)B.2).

20 Even "in states lacking mental activity" (*acittaka*; (4.b) A.1.a).

21 As MSg II.16.1 points out, "Mental perceptual consciousness is conceptual discrimination (*parikalpita*)... It arises from its own seeds of the impressions of language, and from the seeds of the impressions of language of all perceptions (*vijñapti*)." See also Waldron, *The Co-arising of Self and Object*, *infra*, n. 80.

22 ASBh. 62.3ff. *yām adhiṣṭhāyotpannadarśanamārgasyāpy āryaśrāvakasyāsminānaḥ samudācarati*.

23 We use "informed" in the sense of effecting something coming into form, "to give shape to, fashion, impart quality to" (*Concise Oxford Dictionary* 1976).

24 ASBh. 35.26f concurs that the impressions leading toward liberation (*mokśabhāgīyānāṃ vāsanā*) have supramundane causes (*lokottaradharmahetu*).

25 MSg I.61's argument that, "without the [partial elimination of *ālaya-vijñāna*] the gradual cessation (*kramanivrtti*) of the defilements (*sajklewa*) would be impossible," supports the interpretation of *ālaya-vijñāna* as a set of aggregated processes, not a singular entity.

26 MSg I.1. *anādikāliko dhātuh sarvadharmasamāwrayah/tasmin sati gatih sarvā nirvāna ādhigamo 'pi ca*. Sanskrit original in TBh 37.

27 (MSA XIII, 19; MVBh. I.22.c–d). See also Jaini (1959a, 249), Johansson (1979, 102), and especially Keenan (1982) for a lucid treatment of this question in early Yogācāra.
28 "It is plain that when the *Laṅkāvatāra Sūtra* identifies the two terms, this scripture necessarily diverges in the meaning of one or both of the terms from the usage of the term Tathāgata-garbha in the earlier *Śrī-māla* or of the term *ālayavijñāna* in the subsequent Yogācāra school" (Wayman and Hideko 1974, 53).
29 See Michael Sheehy's following chapter (Chapter 4) on this text.
30 Longchenpa's (1971c, vol. 1, 445.3) *The Seminal Quintessence of the Profound*, does present only three classifications of the universal ground, through precisely such a consolidation of the last two features from the fourfold set.

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# 4

# RANGJUNG DORJE'S VARIEGATIONS OF MIND

## Ordinary awareness and pristine awareness in Tibetan Buddhist literature

*Michael R. Sheehy*

Buddhist meditative practices, in their magnificent varieties, recognize the importance of acknowledging one's interior life.[1] For there to be contemplative cultivation of the human mind, and total flourishing of one's capacities, there must be an honest assessment of the habits of awareness. In order to asses the ordinary habits of awareness, Buddhist contemplative traditions have devised introspective techniques and composed personal-guidance texts for the practical application and instruction of contemplatives in discerning what is psychologically demeaning from what is psychologically enhancing within the life of the mind.

Oscillating within the polarities of seduction to repulsion, hopefulness to fearfulness, attraction to aversion, living within this natural divide as if internal discursive dialogues were the only life of the mind, ordinary awareness remains trapped within its patterns of reactivity and obsessive self-preoccupation. Recognizing this divide, and the contemplative torque that follows acknowledging one's interior life, Buddhist contemplative and psychological traditions emphasize knowing how awareness can reify the repetitive patterns that create discursiveness and emotional upset – saṃsāra (*'khor ba*), and the conscious life that lies beyond those disturbing patterns of anguish – nirvāṇa (*myang 'das*).[2]

In order to differentiate everyday delusory conscious experience in all its multifaceted cognitive, affective, and conative dimensions from non-delusory pure lucent wakefulness, we will investigate the mind through our reading of a fourteenth century Tibetan text by the Third Karmapa Rangjung Dorje. Since Rangjung Dorje's treatise is concerned with clearly distinguishing buddha minds from the minds of non-buddhas, it serves as a support for meditators who wish to proceed towards buddhahood without confusion. Through our reading, we will examine how the 8 modalities of ordinary non-buddha awareness interplay with the 5 types of pristine buddha awareness in order to address the question: "What is the distinction between ordinary awareness and pristine awareness?" – or, as

Rangjung Dorje so succinctly asks at the onset of his treatise, "From what source does so-called 'delusion' and 'non-delusion' arise?"

## The text

In his short text entitled, "Ordinary Awareness and Pristine Awareness, A Treatise on the Distinction," the Third Karmapa Rangjung Dorje (1284–1339) discusses the differences between ordinary modes of awareness – *rnam shes* – and pristine awareness – *ye shes* – or the differences between non-buddha minds, and the mind of a buddha. Synthesizing psychology and metaphysics drawn from the Abhidharma, epistemology, Madhyamaka, and Yogācāra philosophy of mind with Vajrayāna understandings of consciousness and its transformations, this text, along with the author's "A Precise Ascertainment of the Essence of Enlightenment," and "The Profound Inner Meaning," is regarded as one of the seminal texts of the Karma Kagyud tradition.[3] It belongs to the genre of Tibetan Buddhist contemplative literature that clearly distinguishes (*shan 'byed*) the experiential topics necessary for accurately proceeding with one's meditative praxis.[4]

Succinctly stating the intent and content of this treatise, Jamgon Kongtrul explains in his commentary:

> This treatise explains the orientation of ordinary awareness and the orientation of pristine awareness by condensing their respective meanings. It explains how the root of delusion and non-delusion are the everyday mind, and it establishes how appearances are mind, it demonstrates how the mind was never born, and it explains how the causal condition of delusion is the eight modes of ordinary awareness.[5]

Our reading of my selected translated verses of this fourteenth century treatise will be accompanied by its word-for-word commentary (*tshig 'grel*) by Jamgon Kongtrul (1813–1899) entitled, "An Adornment of Rangjung Dorje's Essential Intent" and its expanded commentary (*mchan 'grel*) by the Fifteenth Karmapa Khakyab Dorje (1871–1922) entitled, "Oral Advice of Manjushri, The Ketaka Gem of Untainted Radiance."[6]

## The basic dichotomy

### *Buddha minds and non-buddha minds*

Within Tibetan Buddhist psychological and contemplative literature, there is a common phrase: "*sangs rgyas med cing sems can med*," "without buddhas, there would be no sentient beings." This is to say buddhas (*sangs rgyas*) are those who have cleared (*sangs*) away the darkness of both the cognitive and emotional obscurations while they have expanded (*rgyas*) the brilliance of both the pristine awareness that knows the nature of reality, and the pristine awareness that knows

the multiplicity of everything knowable.[7] In other words, because the mind is capable of concealing and contracting as ordinary non-buddha awareness, it has the capacity to purify and flourish as the pristine awareness of a buddha.

Accordingly, non-buddhas or sentient beings are literally "those endowed with a mind" (*sems can*), a mind (*sems*) deluded by the perceptual distortions (*'khrul snang*) that alter conscious experience, and inhibited by emotional and cognitive obscurations (*sgrib gnyis*).[8] These double inhibiting forces obscure pristine awareness like a veil covering the buddha mind, creating a schism between awareness and its objects. Jamgon Kongtrul likens this schism to refracting representations in a mirror:

> In a mirror, images appear – as if appearing to exist or not. By not knowing the appearances of mind, conceptual dividing gives rise to dichotic divisions. Because conceptual dividing and habitual propensities act in unison, multiplicities arise from the mind. Human beings, outward appearances, the realms of our world – they are all merely the mind.[9]

This dichotomous perception (*snang gnyis*), the ordinary habitual tendency of awareness to bifurcate conscious experience, is the basic schema that separates buddha minds from the minds of non-buddhas.

While the ordinary awareness (*rnam shes*) of non-buddha minds divides and discerns (*rnam*) the features of awareness (*shes*) according to its spatial and temporal referents, the pristine awareness (*ye shes*) of buddha minds operates without spatial or temporal (*ye*) designations of awareness (*shes*).[10] In fact, the Tibetan technical terms for awareness reflect these meanings. For instance, the Tibetan term for ordinary awareness or consciousness is "*rnam par shes pa*," a translation of the Sanskrit term "*vijñāna*" that literally means, "knowing through divisions" and is commonly defined as "cognizing through discerning the essence of sensible objects."[11] Choosing to emphasize the timeless, atemporal, and primordial connotation of awareness associated with enlightened beings,[12] early Tibetan translators opted to transfer the Sanskrit term "*jñāna*," which is equivalent to the Tibetan term "*shes pa*" ("to know") into "*ye gnas kyi shes pa*" which can literally be rendered as "timelessly abiding awareness," and which has no Sanskrit equivalent; it is defined as "the empty lucent cognizance that abides through the natural continuum of all sentient beings."[13]

This natural continuum is the common ground (*gzhi gcig*) from which awareness oscillates. Out of its active oscillation, awareness either strays into delusional (*'khrul pa*) modes of objectifying phenomenal forms, or continues free from delusions (*'khrul bral*). As Jamgon Kongtrul writes in his commentary on the title of Rangjung Dorje's treatise:

> Just as the eight modes of ordinary awareness at the root of saṃsāra appear as sentient beings possessed by delusion – in the same way, the pristine awareness that is the nature of nirvāṇa appears as buddhas, free from delusion. Although their basis is the same, their differentiated ways of appearing are completely distinct.[14]

Though their modes of operation are distinct, buddhas and non-buddhas share the same basis. Without conceptual division (*rnam par rtog pa*), awareness would continue unaltered, but because awareness makes conceptual divisions, ordinary awareness is entrapped within the limits of its self-designed dichotomy.[15]

## The dynamics of dichotomy

### *A typology of mind*

To consider Buddhist contemplative techniques and introspective methods for discerning the life of the mind means to take into account traditions that have given priority to subjectivity and the immediacy of conscious experience. Within Abhidharma literature, there are intricate systems of classifying the phenomenal factors (S: *dharma*) of experience in accord with moments of the mind.[16] Based upon first-person accounts of consciousness and the experiential correlates of consciousness, the Abhidharma systems developed extensive typologies of mind (*sems*) and the mental phenomena that arise from the operations of mind (*sems byung*). Since these typologies are based upon descriptive accounts, they offer an event-ontology rather than a substance-ontology, an experiential analysis of awareness that undermines the idea of a coherent, unified self.

Examining the continuum of personhood and the processes of perceiving, Buddhist analysis of mind generally classifies experience into two types: interior awareness (*nang gi shes*), and exterior referents (*phyi don*).[17] More specifically, Abhidharma literature subdivides the dynamics of dichotic experience into 6 sense faculties (*dbang po*), 6 sensible objects (*yul*), and 6 modes of perceptual awareness (*rnam shes*). The 6 faculties are the sensory capacities of the eye, ear, nose, tongue, body, and mind; the 6 objects are the senses of sights, sounds, smells, tastes, textures, and mental phenomena; the 6 modalities of perceptual awareness are visual, auditory, olfactory, gustatory, tactile, and mental. Each of these specific perceptual modalities of awareness arises automatically when a particular sensible object comes into its corresponding sensory domain, and interacts (*reg pa*) with the correlative sense faculty.[18]

The six perceptual modalities of awareness operate as an integrative system to acutely attend (*rtog pa*) and sustain a reflexive attention (*dpyod pa*) of distinct external objects.[19] In the immediately succeeding instance of unmediated sensory perception, these two subtle inseparable factors select and steadily consider the presence of discrete discontinuous moments of awareness – like a bumblebee hovering over, and inspecting a honeysuckle blossom.[20] Questioning this selective perceptual process, and its analysis of particular objects, Rangjung Dorje writes:

> Ordinary conscious awareness of the five sense entrances, by having accepted and rejected forms, sounds, smells, tastes, and textures, have generated emotional disturbances. So, what are these so-called sensible

> objects? If the wise carefully examine, they will not be able to establish the existence of anything external, such as atoms and so forth, as other than their own discerning cognitive awareness.[21]

Not the same and yet, not different, ordinary perceptual awareness and its objects co-create each other. In this way, duality does not occur due to either exterior objects, or interior awareness.[22] Rather, it occurs due to the confluence of multivariable circumstances generating the conditions for dichotomy.

Noting the co-relational nature of perceptual awareness and sensible objects, Jamgon Kongtrul explains the conditions for their co-arising:

> The "predominant condition" (*bdag pa'i rkyen*) allows for perceptual awareness in congruence with the five sense entrances of the eyes, ears, nose, tongue, and body along with immanent mental awareness. The "objective condition" (*dmigs pa'i rkyen*) allows for distinct sensible objects – the five external referents of form, sound, smell, taste, and texture to encounter and impinge, depending upon contact.[23]

In order for a moment of perception to occur, a sense faculty and its respective mode of perceptual awareness must be present. Once these factors are present, a sensible object must occur in the field of one's sense faculty. In other words, the primary or "predominant condition" necessary for perception is the capacity to perceive. When this capacity is present, there must also be the presence of a sensible object or the "objective condition." The nexus of these inter-relational factors allows for perceptual awareness, as such awareness occurs as a consequence of the concomitance of sense faculties and objects.[24]

### *The subject–object complex*

Observing that perceptual awareness occurs in concurrence with its sense faculty, and its correlative sensible object, Abhidharma traditions determined the consequence of the confluence between these three factors to be a dualistic experience – the experience of separateness between interior awareness and exterior referents.[25] As we have seen, when the conditions for perceptual awareness are present, the six modes of sensory awareness selectively perceive, setting awareness apart from objects. The structuring of this subject–object complex (*gzung 'dzin*) is based upon bifurcation of the percept from the perceiver at the instant of perception. For this to occur there must be subjective perceptual fixation (*'dzin*) on an object of fixity (*gzung*). When percept and perceiver are two, polarizing patterns of opposition ensue, inciting seduction and repulsion. As Jamgon Kongtrul explains

> By having relied upon touch, desiring what is beautiful, melodious, and so forth, and by being seduced by what is enticing, disturbing emotions and lustful attachment arise. By not wanting what is ugly, unpleasant,

> and so forth, and by being repulsed by what is disgusting, hostility and hatred arise.
>
> By not realizing the nature of equanimity and balance, ignorance arises and karma is accumulated. So, having accepted this, beings continue to wander throughout saṃsāra, creating affection for attractive appearances, as if they were real.[26]

When an object of sensation (*yul*) and its subject of sensory awareness (*yul can*) are split, this schism incurs a perceptual division that results in attraction towards what is lust inducing, repulsion away from what is disgusting, and indifference in regards to what is neutral. In this sequence, what follows is a dichotomizing perceptual process that situates subjective experience in contrast to objective reality. With subject and object divorced, a protective impulse to fixate onto one's sense of self (*bdag 'dzin*) against something "other" succeeds.

As the centerpiece of experience fixates onto its sense of self-importance, patterns of reactivity and defensiveness are stimulated, and discursiveness is initiated. Fixating activates cognitive and affective responses resulting in neurotic thought (*rnam rtog*), and emotional upset (*nyon mongs*). Intending to transform neurosis and disturbing emotions through ameliorating the conditions that generate dichotomizing perceptions, Rangjung Dorje returns to his earlier question: "So, what are these so-called sensible objects?" To deconstruct the common conviction that external reality is not the mind, Rangjung Dorje examines as follows:

> If the substance of sensible objects were simultaneously other than conscious awareness, then they could not have the same nature. Because inert material substances do not arise from invisible immaterial cognition, their arising cannot be related. By accepting that sensible objects are other than awareness, it is illogical to think that sensible objects would appear from conscious awareness.[27]

Addressing the reductionistic and theistic tendency to view sensible objects as being in some way absolutely other than awareness, Rangjung Dorje argues that if matter were entirely different from cognition, then cognitive awareness could not perceive material forms – the sensible objects of sight, sound, smell, taste, and texture. For the mind to perceive matter, materiality and conscious perception must share a common nature. If material objects and conscious awareness did not share a common nature, then they could not relate, and there would be no possibility for perception.

Rangjung Dorje recognizes the perplexity of the "mind–body problem" that reduces awareness to an interior substance and sensible objects to an exterior substance, leaving the two irreconcilably different.[28] If we do not consider the causal-conditional matrix for awareness, and we are unable to account for the

neurological correlates of conscious experience, we are left with two lines of thought: either consciousness is an emergent property of matter, or matter sprang from consciousness.[29] In either case, the nature of interior awareness is equated with pure consciousness while the nature of exterior objects is equated with pure matter. Knowing the relationship between awareness and matter either shares the same nature or is of a different nature, Jamgon Kongtrul reconciles this fundamental dilemma:

> If material exterior sensible objects such as forms and so forth were to exist as actual referents other than interior awareness, then awareness and objects would be two, and a relationship of the same nature could not exist.
>
> If this were so, then a relationship between the sources from which they originate would not exist. This would make it impossible to demonstrate any involvement between objects and awareness, and immaterial discerning cognition could not be established as tangible matter.
>
> Without cognition being able to produce inert material substances, these two divisions demonstrate themselves to be contradictory. The consequence of this line of thought is that materials would produce physical results from non-physical causes. Since this deduction is logical, it makes sense to accept that awareness and objects cannot exist without a relationship among the sources from which they originate.[30]

Because the essence of awareness is not consciousness and the essence of objects is not matter, a relationship can exist between the two. Since they arise from the same source, they cohere, and share a relationship of the same nature (*bdag nyid gcig pa'i 'brel pa*).[31]

Refuting the reductionistic tendency to assert that facts about cognitive events are reducible to physical facts, Kongtrul continues to explain how perception cannot occur through the logic of reductionism:[32]

> In this way, the consequence that would follow is that visual awareness and the other perceptual modalities, as well as forms and the other sensible objects could not appear. There would be no reason for them to appear since they share no relationship to each other.[33]

Following this logical consequence, Kongtrul concludes that since sensory perception accompanies sense referents, awareness and matter are inseparable. Regardless of their seemingly bipolar identities, awareness and matter – mind and body – relate as a subject–object complex.

In response to this assertion that awareness and objects share the same nature, the rational line of thought that follows is: "Since I can see and feel that objects are physical, and that my mind is not physical, they are two different things,

aren't they?" Anticipating this question, Rangjung Dorje replies:

> Because of this, whatever appears is not a sensory object different than awareness. The occurrence of these objects is similar to the experience of cognizant-reflection. In fact, even the appearance of minute indivisible particles and vast openness are mind. Since their existence cannot be established externally or separately, the realization is that creators such as Brahmā and other such creator gods do not exist.[34]

The natural deduction of Rangjung Dorje's verse is that whatever appears objectively cannot be ultimately determined as outside the purview of awareness, leaving ultimate interiority and ultimate exteriority as equally false constructs.[35]

### *The merely dreamlike mind*

Although an unreflective mind will remain entangled within its self-deceptive discursive schemas, our interior life is knowable through reflection. Due to the mind's capability to know itself – its capacity for cognizable reflexivity (*rang rig*) – awareness is able to cognize awareness.[36] Likewise, just as awareness has introspective access to its own private sphere of subjectivity, awareness also has access to the objective sphere. In the same way as a mind can know its own conscious lifeworld, a mind can know the outward world of appearances.

For this reason, as Rangjung Dorje mentioned, being conscious of one's own awareness is like being conscious of externalized things, whether this is the subtlest speck of matter, pervasiveness, or a tremendous creator. In this way, whether a mind cognizes non-objectified reflective mind forms or objectified forms such as an atom or a god – whether a mind concretizes awareness, or concretizes phenomenon that seem to be outside awareness – these experiences are similar. In describing this nature of conscious experience metaphorically, Rangjung Dorje writes: "Furthermore, the relationship between one's mental awareness and phenomena are similar to the experience of a dream. This is to say, this relationship is consumed by the mind fixating onto referents that have no true reality."[37]

Once the five modalities of sensory perceptual awareness directly apprehend a sensible object, the sixth mode of perceptual awareness cognizes the object apprehended. Though mental awareness (*yid kyi rnam shes*) cognizes sensory perception or apperceives, it does not directly perceive sensible objects. Operating synchronously with the five modes of sensory perceptual awareness, mental awareness perceives the cognitive phenomena (*sems byung*) immediately proceeding instants of sensory perception. These mental acts are what characterize and qualify conscious experience; they are the activated events that make up the phenomenal contents of mental awareness.[38]

Mental awareness relates to these mental factors in a dream in the same way that it relates to these factors as waking awareness. Dream phenomena arise within interior awareness, and are conceived by mental awareness as being

exterior phenomena. When one awakes from a dream, one knows that what was perceived during dreamtime was not real – yet while dreaming, it was conceived as real. This is exactly how mental awareness cognizes. Khakyab Dorje explains:

> While asleep, the habitual propensities of being awake are subdued beneath the threshold of waking awareness. While dreaming, one continues to directly experience perception of sensible objects. For instance, previous habitual propensities of one's mental awareness can bring forth the recollection of a vase.
>
> That very instance of perception is a crucial juncture. As soon as sensory perception occurs, the habitual momentum related to that objective referent will continue as the following thought. Without examining one's perceptual experience of the vase's presence, it ends up that one conceives reality as concrete, without establishing its actual realness, other than mental awareness.[39]

Whether we are awake or dreaming, mental awareness associates what is perceived according to the habitual propensities (*bag chags*) accumulated during previous encounters with objects of awareness. At this instance of perceptual recollection, these propensities are reactivated. As the momentum of mental awareness is propelled by habitual force of thought, cognitive propensities perpetuate the dichotic dynamic. By conceiving what is perceived, mental awareness seizes onto objects as if they were real (*bden zhen*), and this cyclic process of cognitive re-occurrence re-initiates the subject–object complex.

Describing how this reifying habit of awareness generates the entirety of experience, Rangjung Dorje states

> Likewise, the six modes of ordinary perceptual awareness, the appearance of exterior referents, living beings, self-importance, cognitive discernment, and the manifestation of whatever appears are not produced from anything else; they are not produced from themselves, they are not produced from both themselves and others, and they are not produced from the absence of themselves and others. In the same way, the victorious one taught that everything within saṃsāra and nirvāṇa is merely the mind.[40]

As we have discussed, the exterior referents of awareness cannot be ultimately separated from awareness itself. They are not produced from anything other than awareness. Once this is understood, Rangjung Dorje considers how awareness lacks intrinsic existence by being oriented in relation to its objects. Here, Jamgon Kongtrul gives an example to demonstrate the relativity of awareness:

> Well then, though the reality of exterior referents cannot be established, what if we wonder about the existence of interior awareness? To illustrate that it also can not be established, let's consider what is referred to as "that

> mountain over there." In the same way that that mountain is relative to "this mountain over here," awareness and the objects of awareness are relative to "me." If there were no exterior referents to apprehend, there would be no apprehending awareness whatsoever on which to establish "me."[41]

As exterior referents are oriented according to interior awareness, awareness is oriented in relationship to its referents. In order for there to be perspective, there must be a reference point, and the reference point for awareness and its correlative objects is one's self, the center of attention.

## The multidimensionality of awareness

### *Supraliminal and subliminal awareness*

To account for how unconscious propensities influence the conscious continuum without substantiating stimuli or mental phenomenal factors, Yogācāra analysis of mind elaborated on earlier Abhidharma formulations.[42] Contributing to the observation made within Abhidharma literature that conscious experience is liminal – occurring at the threshold of sensory perceptual awareness and mental awareness, this new model of mind introduced two modalities beneath the threshold of awareness. In addition to the six modalities of supraliminal awareness discussed above, Yogācāra scholarship introduced two modes of subliminal awareness: tainted mental awareness (*nyon yid kyi rnam shes*), and the universal basis for awareness (*kun gzhi rnam shes*).[43]

In the same way that the modalities of ordinary supraliminal awareness are not vacuous but conditional, these additional modes of subliminal awareness also occur due to the intersection of circumstantial forces. As was mentioned earlier, sensible objects along with mental phenomenal factors constitute the "objective condition" (*dmigs pa'i rkyen*), while the "predominant condition" (*bdag pa'i rkyen*) for perceptual awareness is the sense faculties.[44] Clarifying that these faculties are not the actual organs of sensory perception but rather their basic capacities, Rangjung Dorje describes these faculties as "lucidity endowed with form," the organic constituents of consciousness.[45]

In accord with the "objective condition," sensible objects are perceived directly by sensory awareness, and the proceeding instance gives rise to a moment of indirect cognitive apperception of mental phenomenal factors. This instance apperceives the mental representation, or image of an object.[46] Since mental awareness does not directly perceive objects but rather apperceives the immediately following mental factor, this modality of awareness acts as an intermediary between mental awareness and the other modalities of perceptual awareness. As Rangjung Dorje states, "Although sensory perceptual awareness perceives objective referents, it is the conceptualizing mental factor that cognizes their distinctive qualities. Mental awareness relies upon both the immediate and tainted mental awareness."[47]

Expounding on how the cognitive modalities concur, Kongtrul further elucidates this instantaneous perceptual process:

> Just as visual perceptual awareness sees exterior referents, all the five modes of perceptual awareness perceive their corresponding objective appearances of forms, sounds, smells, tastes, and textures without being aware of a particular thought such as "vase" or "pillar." For example, through visual perceptual awareness, blue arises without thinking: "this is blue."[48]

What happens during this concurrence is that mental awareness begins to form a concept of what is perceived. Kongtrul continues

> This is why, at the onset, sensory modalities of awareness perceive their apparent objects. Then there is awareness of the object's distinctive qualities through the conceptualizing mental factor. Due to this interior mental factor, conceptualization apprehends the distinguishing qualities of an object. By thinking, "this sight is awful," "this sight is wonderful," or having the thought, "this sound is pleasant," "this sound is unpleasant," and so forth, conceptualization comes about through reliance upon mental awareness.[49]

As one of the five omnipresent mental factors, conceptualization (*'du shes*) is the act of cognition that identifies the specific characteristics of an object of perception, associates that identification with a thought, and consequently reifies what is perceived.[50]

Although conceptualization is the conceptual structure that associates perceptions with latent memory traces of previous perceptual experiences, mental awareness is not the source from which these latent traces re-arise. For mental awareness to access the associative predispositions that lie dormant beneath perceptual awareness and that are reactivated through apprehending the particular qualities of a percept, mental awareness is dependent upon the two facets of the seventh modality of ordinary awareness: immediate mental awareness (*de ma thag pa'i rnam shes*), and tainted mental awareness (*nyon yid kyi rnam shes*).

In accord with the two conditions that allow for the appearance of sensible objects and their perception to occur, the "immediate condition" (*de ma thag pa'i rkyen*) provides the circumstantial forces for an immediately proceeding moment of awareness. Because immediate mental awareness is the condition for perceptual awareness to occur and re-occur, ordinary awareness is able to generate perception of an object in an instant, and then dissipate in the next. Rangjung Dorje explains further:

> Because immediate mental awareness is the condition for the generation and dissipation of the six modes of ordinary perceptual awareness, it is

> in congruence and accordance with the frequency of the instantaneous generation and dissipation of the six modes of ordinary perceptual awareness. It is known by a mind imbued with yoga, and through the teachings of the victor.[51]

This successive sequence is what determines the liminality of awareness, the surface-level continuum of consciousness, as well as the liason between supraliminal awareness, and the subliminal basis for awareness. Jamgon Kongtrul unpacks the reciprocity of this condition:

> What is referred to as "immediate mental awareness" is what creates the generative condition for immediacy, so that the six modalities of perceptual awareness can rapidly arise. Even if the six perceptual modalities were to cease, the six modalities' capability for immediacy would create the condition for potentials to subside into the universal basis. This is why it is the immediate condition for both the generation and dissipation of ordinary awareness.
>
> Furthermore, if there is cessation of the six perceptual modalities, this is explained to be identical to the mental faculty, since the immediate modal awareness continues to deposit (potentials) within the universal basis. All of these potentials instantly become like the conditions that force waves from water. This is how the immediate mental modality emerges through diffusing and deeply agitating the abiding universal basis.[52]

Sustaining homogeneity among supraliminal and subliminal modes of awareness, and maintaining coherence between the cessation of one moment of awareness, and its antecedent, immediate mental awareness thus allows for the association of unconscious propensities with one's perceived experience.

To understand how immediate mental awareness acts as a mediatory agent that maintains the continuum of awareness while simultaneously individuating, dividing, and identifying with the conscious continuum, Rangjung Dorje introduces the affectively tainted facet of mental awareness:[53]

> Within the mind itself, there is an aspect of this immediate mental awareness that is said to be "the mental awareness endowed with tainted emotionality" because, due to the transitory nature of the constituents of embodied experience, it fixates onto an egocentric attitude, conceitedness, and self-infatuation while infused with ignorance.[54]

Reconciling the egocentric conviction that there is an autonomous agent that intrinsically acts in the world with the observation within Buddhist philosophy of mind that there are only transient fluctuations of mental moments, Waldron hints at how the mind (*sems*) is not identical to the phenomenal factors that arise within the mind (*sems byung*).[55]

By misidentifying the active contents of mind as the nature of mind, a dissonance occurs that consistently reaffirms cognitive and affective factors, and reasserts the feeling of individuation. Though this felt sense of a unified self will persist unanalyzed, Buddhist analysis suggests that this is due to a misapprehension of the actual flux of awareness. As this analysis deepens, afflicted factors are regarded as actively associated (*dang bcas*), or neutrally connate (*lhan skyes*). Because the visceral sense of a self is so persistent and is not determined by mental fluctuations, the four afflicted factors – egocentric attitude (*ngar sems*), conceit (*nga rgyal*), self-infatuation (*nga la chags*), and ignorance (*ma rig pa*) – are connate or indeterminate.[56] Jamgon Kongtrul elaborates

> Moreover, not realizing that the nature of one's own mind is undefiled and that the universal basis of one's mind is imbued with defilements; through objectification, there is an egocentric attitude, conceitedness, seizing onto the feeling of oneself as superior, and then having seized onto cherishing oneself more than others, there is coveting and self-infatuation – all while entrenched within ignorance, not realizing that "I" has no reality. Due to perpetual dividing, these four disturbing emotions persist.[57]

With these four afflictive factors constantly present, tainted mental awareness mistakenly identifies the representations of mind as the actuation of personal experience. This act of mistaken identity results in the assumption of a substantiated self.

Based upon this false assumption of a self, the operative function of tainted mental awareness is to project assumptions outward. Consequently, these pretentious projections impute affectively toned stains or defilements (*dri ma*) onto conscious experience. It is this affect that Kongtrul refers to as invalid cognition (*tshad ma ma yin*):

> In regard to this modal awareness, where tainted affectivity abides: it is without valid cognition, and it gives rise to every invalid means of cognitive understanding. The habitual propensities of the universal basis are the essence of its inhibitive force. Because it is indeterminate, it is the source of all conceptual imputations and disturbing emotions.
>
> Moreover, it is explained as "inauthentic conceptual imputation." Because of this, the six modalities of perceptual awareness have produced distortions. By not recognizing the disturbing emotions that are to be relinquished, external projections persist.[58]

Propelled by the imprints of previously experienced percepts and the egotistic impulse to substantiate itself, this facet of tainted mental awareness is what distorts experience. Because it does not depend upon associative mental factors, its egocentrically tainted affect subsists alongside all conscious events. With these afflictive affective factors constantly ascribing conceptual imputations (*kun rtog*)

and emotional distortions (*nyon mongs*), tainted mental awareness misconstrues what ordinarily can be known.

Coupled together, immediate mental awareness and tainted mental awareness act in unison to support the continuous processing of mental events, systematizing feedback between the supraliminal and subliminal modes of awareness and affectively influencing apperception. In brief, these two facets operate within mental awareness to: (1) maintain continuity and cohesiveness, and (2) obscure the basic nature of awareness.[59] Although this modality of subliminal awareness enables propensities to persist above the threshold of awareness, the reservoir of unconscious dispositions is the universal basis for awareness, *ālaya-vijñāna* (*kun gzhi rnam shes*).[60]

As the receptacle for every remaining impression of past apperception, and uninitiated tendency, this subliminal mode operates as the residual basis or ground (*gzhi*). On this ground, imprints of previous actions lie like seeds (*sa bon*) dormant until the appropriate conditions ripen them into fruition (*'bras bu*). These potential seeds are latent memory traces that pervade and perfume this substratum until tainted mental awareness activates them. For this reason, the universal basis is referred to as the "causal condition" (*rgyu'i rkyen*), the fourth and final condition required for ordinary awareness to occur. Rangjung Dorje explains

> To those with particularly refined intelligence, the Buddha taught the universal basis for awareness. It is also referred to as the "foundation for awareness," the "source for awareness," and the "receptacle for awareness." Within it, all of the latent propensities generated by the seven types of ordinary awareness are accumulated distinctively and neutrally – like rainwater flowing into the ocean. This is why it is called the "ripening awareness."
>
> Because it generates everything and is the basis from which all potentials emerge, it is referred to as the "causal condition." Nevertheless, since it is counteracted when the seven types of ordinary awareness are inverted, it is also known as "conditional ordinary awareness."[61]

Being the abode or abiding place (*gnas*) for all associative as well as connate factors, the universal basis is the sustaining contributory force that gives rise to both constructive and destructive karmic patterns. In essence, it is the fundamental structuring that underlies all experience. Yet, it is not an isolated mode of awareness.[62]

In fact, this universal ground is the residing place of sensible objects, sense faculties, and modal awareness itself. Jamgon Kongtrul likens this relationship between the seven modes of awareness and their basis to rain and the ocean:

> For example, when it rains, rainwater flows into the rivers, and then their confluence flows into the ocean. Similarly, the six modes of perceptual

> awareness are like rain, the seventh mode of awareness is like the rivers' confluence, and the universal basis is like the ocean.[63]

Once a moment of perception occurs, the succeeding moment of apperception leaves an impression of that perceptual experience on this universal subliminal mind. In this way, mental, vocal, and somatic actions create habitual propensities for future perceptions, and future perceptions are generated by the subliminal mind. This reciprocity persists through the influence of tainted mental awareness that washes over experience like waves. Jamgon Kongtrul elaborates

> Moreover, when the conditions are gathered, just like waves immediately arising and billowing forth from the ocean – from the universal basis that is the repository for all potentialities, tainted mental awareness billows forth and arises along with immediate mental awareness, and the efficacy of each and every distinctive potentiality that lies latent upon the surface of the universal basis is activated.[64]

Overflowing what is above and below the surface of mind, the eight modalities overlap past with present awareness, and present awareness with future awareness to circulate – in a liquid-like way – and flow forth seemingly new waves of awareness.

### *The presence of pristine awareness*

As the generative matrix from which one's latent dispositions are set into motion, the universal basis is the creative substructure of reality and experience. The fact that we are unable to distinguish this subliminal oceanic mind from the actual experience of reality sends sinuous reverberating waves undulating onto the shores of supraliminal awareness. With these waves, pulled and pushed by the gravitational force of previous impressions, being actuated in every moment of apperception, the subliminal basis for ordinary awareness becomes one's ordinary habits of awareness.

Underscoring this mutual causal conditioning, Jamgon Kongtrul reminds us of how experience and reality co-create each other:

> Furthermore, the universal basis for ordinary awareness is the cause of all disturbing affective phenomena. Similarly, all disturbing affective phenomena are the patterning of the causal condition that is this universal basis for ordinary awareness, because nothing is perceived other than causal conditions.[65]

In this cyclic way, the patterning of one's emotive and cognitive propensities determines one's present awareness, just as present awareness patterns one's propensities.

With this interpenetrative system circulating, Kongtrul continues to emphasize the importance of the practical arts of inner transformation, and how plasticity allows for a reversal of the universal basis for awareness:[66]

> Because everything interior and exterior arises and is created from it, and all hostile potentials come from this universal basis, it is said to be the "causal condition" of the six modalities of perceptual awareness. Through the capacity of learning and meditation, the seven modalities can internally reverse. Due to not accumulating new propensities – like rainwater in a quiescent ocean of contemplation – there is no cause for the universal basis to arise, because the universal basis has been reversed.[67]

Just as unreflective minds extrovert through the systematic sequence of conditioned patterns of reactivity, a contemplative mind introverts these conditional sequences in order to fundamentally reorient awareness. Because the universal basis is the continual source of renewal, it is where a conscious revolution occurs.

The reversing of the psychological dispositions that causally condition apperceptions takes place through the meditative practice of quieting (*zhi gnas*) and penetrating with insight (*lhag mthong*) the automated reactive patterns that persist at the core of ordinary awareness. Although this radical shift inverts delusional habits to cause a pure view in align with reality (*yang dag pa'i lta ba*), this revolution of the basis is not the cause of pristine awareness (*ye shes*). Jamgon Kongtrul elucidates this difference:

> As far as explaining the pure aspect of the universal basis, if we describe the universal basis as the conventional cause of utter purity, then that is correct. If we explain the universal basis for ordinary awareness as the cause of the pristine awareness of a nirvanic buddha, then that is incorrect.
>
> If that's so, then illustrious phenomena and enlightened buddhahood are inseparable. However, if one asks: "Don't thoughts that rely upon a perfectly pure view subside upon the surface of the universal basis, and haven't these utterly pure phenomena arisen in the same way?" In response to this, the actuality of all phenomena, the very nature of one's mind that is the utterly pure ultimate dimension relies upon the essence of enlightenment.[68]

When the tendencies that induce and influence ordinary awareness are eliminated through contemplative inversion, their momentum is reversed and the potentiality of the universal basis to manifest delusory awareness ceases. When this happens, the veil of distorted perceptions falls away, and the defilements that cover the pure aspect of the universal basis are reversed, revealing pure view – but still not the pristine awareness of a buddha.[69]

## Reflections

In conclusion, or at least concluding our discussion of ordinary awareness up to this point within the treatise, we can offer a few reflections on how ordinary awareness transmutes into pristine awareness. To begin with, let's return to Kongtrul's commentary on the meaning of this treatise:

> Not knowing one's own nature, the universal basis created the source of delusion through actuating the subject–object complex. That which is designated as "sentient beings" and the revolving "three realms" excessively lusts for pleasures, and has brought about this great ocean of suffering.
>
> By being free of the obscuring defilements that seize onto the five constituents of a sentient being's embodied experience, one is totally transformed. The five types of pristine awareness that are the actual nature of the four dimensions of enlightenment manifest.
>
> In brief, the basis of designating "sentient being" is the five constituents. This is to say, the source of perceptual acquisitions is the everyday mind, mentation, and modal awareness. The source of buddhahood is born from transforming the five constituents of a sentient being.[70]

These five constituents (*phung po lnga*) are the synthetic structuring of a non-buddha being's conscious embodied experience. Bound by these formative constituents, sentient beings impulsively act according to habits of awareness that we have described thus far.

Out of the active oscillation of the universal basis, shapes and phenomenal forms (*gzugs*) begin to emerge as the first constituent. As shape and form emerge, a distancing from something enables a sense (*tshor ba*) of something else. Awareness of something to feel is sensation. With sensory perceptual awareness, the subsequent instance apperceives through the conceptualizing mental factor (*'du shes*). Distinguishing apprehended senses of form formulates concepts, and stimulates impulses that imprint subliminal awareness, perpetuating the supraliminal–subliminal course of awareness. These predisposed patterns (*'du byed*) of perception are then activated once the sense of something is perceived, and the dichotic dynamic is reasserted. Once discursiveness initiates, awareness is automated to react to stimuli. All the while, the background synthesis of this fabric of experience is ordinary awareness (*rnam shes*) in its eight modalities.

Considering these constituents to be like an alchemical formula for everyday experience, Jamgon Kongtrul describes how the constituent of form transmutes into physical marks of excellence and boundless melodies of voice, sensation transmutes into blissful repose devoid of subconscious perturbulances, conceptualizing transmutes into vibrational formulations of names and words, predisposed patterning transmutes into the power to magnetize and emanate, and ordinary awareness transmutes into pristine awareness.[71] In this way, through meditative alchemical transmutation, the constituents of non-buddhahood become the

enlightened qualities of buddhahood, and the ordinary habits of awareness shine forth as pristine awareness.[72]

This is to say, although the latent potentials that were accumulated during mental, verbal, and somatic actions to condition ordinary awareness now display mental, verbal, and somatic actions of pristine awareness, the conditions for awareness were not replaced with new conditions. In fact, the very synthetic fabric of ordinary awareness dissolves. With dissolution of the universal basis, the source of delusions that fabricates awareness, there is unfabricated awareness. This is what is referred to as "pristine" (*ye*) "awareness" (*shes*).

Condensing these five displays of pristine awareness into two, Jamgon Kongtrul summarizes how unconditional wakefulness is meditative and post-meditative:

1) The first is the meditative equipoise of the pristine awareness that knows the nature of reality, the ultimate extent of the non-apparent actual nature of all phenomena. "When there is awareness and objects of awareness, the subsequent moment of identifying is not apperceived. At this time, because the identifying qualities do not arise, and because there is stable abiding, nothing emerges."[73] All ensuing phenomena encompassing the three times – every variety without exception – is realized as actually manifesting like an illusion.
2) The second is the post-meditative state of the pristine awareness that knows everything knowable. So it is said that a single instance of knowing possesses the all-encompassing maṇḍala of everything that can be known. Moreover, the pristine awareness of a buddha does not make particularizing divisions in the post-meditative state, although how it knows is merely dependently imputed.[74]

How a buddha knows is best understood in contrast to how a non-buddha knows. To do this, we need to make the simple distinction between modal cognitive operations, that which we have discussed so far, and nonmodal cognitive operations.

If we recall, modal operations conceptually divide (*rnam rtog*) appearances, operating in unison with habitual propensities (*bag chags*) to generate the multiplicity of appearances within the sphere of ordinary awareness. The crucial instance of associating an appearance with a mental representation derived from a previous impression does not occur within nonmodal cognitive operations, the awareness of a buddha. When there is no association with a mental representation, there is no fixation onto the percept, and there is no conceptualizing within the space of meditative equipoise. In the post-meditative state, awareness does not particularize or make arbitrary divisions based upon propensities. Instead, because unconditioned phenomena are not beyond dependent origination (*rten cing 'brel*), the inter-relational nature of awareness and all that is to be known allows a buddha to know phenomena through dependent imputation.[75]

The difference between ordinary awareness and pristine awareness is: a non-buddha delusional mind relies upon representational images of reality (cognitive content that is based upon predisposed apperceptive instances), while

a non-delusional buddha mind does not derive meaning from mental representations, but rather knows the appearances of awareness through the interdependent cognizable nature of mind itself.[76]

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## Notes

1 Personal Tibetan names are phonetisized in the body of the chapter and transliterated in the reference notes. Only selected Sanskrit technical terms are included in the notes. I have consulted two versions of the text (Rang byung 1972 and 2002).

2 Kongtrul comments, "Saṃsāra and nirvāṇa are reifications. Because we can decipher the defiled discursive discriminations of the mind from the undefiled, they are simply distinctions. Discovering in this way alters one's realization of the actual nature of all phenomena" (Kong sprul 1972: 2b.6–3b.1).

3 Rang byung 2002 and 1970. See, Schaeffer 1995.

4 For further readings within this subgenre, Dol po pa 1984: 105–133; Mipham 1972: 42–43; Yon tan rgya mtsho 1971: vol 2. For Longchenpa's distinctions, Germano 1992: 238–260.

5 Kong sprul 1972: 6b.5–7a.1.

6 Rangjung Dorje's root text is thirty-seven verses. We refer primarily to Kongtrul's commentary as Khakyab Dorje's commentary is an abbreviation. (Kong sprul 1972 and mKa' khyab rDo rje 1976.) For notes see, Dkon mchog yan lag 1979. For an account of Kongtrul, Smith 2001: 235–273.

7 Kongtrul writes, "By being completely free of the two obscurations, habitual propensities, and what is held as most dear, a perfect buddha actually perceives the evidence of all possible existence in accord with what can be known" (Kong sprul 1972: 8b.5, verse 4). See, Wayman 1955: 253–268; Johansson 1965: 189–210; Waldron 1990: 65–74; Loy 1988: 42–60.

8 The two obscurations are: (1) emotional obscuration (*nyon mongs pa'i sgrib*); (2) cognitive obscuration (*shes bya'i sgrib*).

9 Kong sprul 1972: 9a.3–9a.4.

10 The "*rnam*" Tibetan prefix is "*vi*" in Sanskrit meaning "to divide," "to discern," "to differentiate," "to fragment." The Tibetan term "*shes*" is "*jñā*" in Sanskrit meaning "to know," or "to be aware." See, Johansson 1965: 189–210; Waldron 1990: 65–74 and 2003: 21–33.

11 *Bod rgya tshig mdzod chen mo* 1984.

12 There are two uses of the term *ye shes* in Mahayana literature: (1) *ye shes* on the path (*lam*) towards Buddhahood; (2) *ye shes* as the fruition (*'bras bu*) of Buddhahood. Rangjung Dorje uses the term to refer to fruitional pristine awareness (*ye shes lnga*).

13 *Bod rgya tshig mdzod chen mo* 1984.

14 Kong sprul 1972: 2b.2–2b.4.

15 Nāgārjuna states, "Saṃsāra occurs at the moment of conceptually dividing, without conceptually dividing, there is freedom" (Kong sprul 1972: 2b.5–2b.6).

16 This is the model of the Sarvāstivādin Abhidharma. For cognitive functions in Pāli Buddhist literature, Johansson 1970: 14–16 and 103–113; Harvey 1995: 141–154.

17 These are categories used by Kongtrul and are not necessarily from Indian Abhidharma literature.

18 Waldron 2003: 29.
19 *Abhidharmakośabhāṣyam*, "Five consciousnesses always include *vitarka* and *vicāra*. They are always associated with *vitarka* and with *vicāra*, for they are gross, being turned towards externals" (La Vallee Poussin 1990: 96–97).
20 Guenther 1976: 50 and Guenther and Kawamura 1975: 102.
21 Rang byung 2002: 10, verse 6.
22 Awareness is a resultant correlation of sense faculties and objects (*rnam par smin pa*).
23 "This is to say, the causal condition (*rgyu'i rkyen*) allows for the universal basis of subliminal awareness (*ālaya-vijñāna*) to arise along with tainted mental awareness (*kliṣṭa-manas*)" (Kong sprul 1972: 12a.2–12a.4). See, Kong sprul 1972: 17a.6–19a.1; Goodman 1979: 177–178; La Vallee Poussin 1990: 296–305.
24 Thrangu 2001: 19–20.
25 The factor of a predisposed tendency (*bag chags*) is necessary for the distinction between perceiver and perceived according to Yogācāra tradition.
26 Kong sprul 1972: 12a.4–12a.6.
27 Rang byung 2002: 10–11, verse 7.
28 Kongtrul refers to reductionism in Buddhist thought

> Since perceptual awareness of the five sense entrances arises from the dynamic presence of the mind's discerning cognition, causes and conditions that function as different from the mere manifestation of the five discrete sensible objects are the hidden molecular particles accepted by the Vaibhāṣika and Sautāntrika Schools of the *śrāvaka* disciples.
>
> (Kong sprul 1972: 12a.6–12b.2)

See, Guenther 1971: 31–89.
29 On reductionism and physicalism, Wallace 2000: 23–27.
30 Kong sprul 1972: 12b.4–13a.2.
31 The shared nature is emptiness (*stong pa nyid*). The luminous (*gsal ba*) nature of awareness allows the mind to know. Thrangu 2001: 21–22, fn. 16.
32 Kongtrul interjects, "If one says that they assert this kind of thinking, then that is reductionism" (Kong sprul 1972: 13a.2).
33 Kong sprul 1972: 13a.2.
34 Rang byung 2002: 11, verse 8.
35 Kongtrul comments, "As soon as this is explained, due to logical deduction, whatever appears externally cannot be established as actual sensible objects separate from interior awareness" (Kong sprul 1972: 13b.1–13b.2).
36 Kapstein 2000: 105–125.
37 Rang byung 2002: 11, verse 9.
38 On mental factors, Guenther and Kawamura 1975.
39 mKha' khyab rDo rje 1976: 46.1–46.3.
40 Rangjung Dorje is mentioning the four extremes of Mādhyamika: (1) existence, (2) nonexistence, (3) both, (4) neither. Rang byung 2002: 11, verses 10–11. See, Ruegg 1977: 1–65.
41 Kong sprul 1972: 14b.6–15a.2.
42 Yogācāra is the name of a Mahāyāna system of thought. See, La Vallee Poussin 1948; Anacker 1988: 183–190.
43 Waldron 2002a: 17–22. See Waldron and Germano in this volume.
44 Rangjung Dorje states, "The six modes of ordinary perceptual awareness are reliant upon the objective conditions of the six sensible objects of form, and so forth" (Rang byung 2002: 11, verse 13).
45 Rang byung 2002: 11, verse 14.

46 Kongtrul comments, "Due to ignorance about these three realms, it is said that the defiled discursive thinking mind cannot establish meaning apart from what is simply its own image" (Kong sprul 1972: 9a.1–9a.2).
47 Rang byung 2002: 11, verse 16.
48 Kong sprul 1972: 19a.6–19b.2.
49 Ibid.: 19b.2–19b.4.
50 Guenther and Kawamura 1975: 23–25.
51 Rang byung 2002: 11–12, verse 17.
52 Kong sprul 1972: 20b.1–20b.4. Here, "the cessation of the six perceptual modalities" refers to meditative quiescence that halts mental events. See Waldron 2003: 149.
53 Waldron has pointed out that the two facets of the seventh mode of awareness developed in the *Mahāyāna-saṃgraha* (Waldron 2003: 147).
54 "Constituents of embodied experience" refers to the five psychophysical aggregates (*phung po lnga*). Rang byung 2002: 12, verse 18.
55 Waldron 2003: 205, fn. 35.
56 Waldron 2003: 148.
57 Kong sprul 1972: 21a.3–21a.5.
58 Ibid.: 21b.3–21b.5.
59 Rang byung 2002: 12, verse 19.
60 For discussion of *ālaya-vijñāna* and the unconscious, see Waldron 1990: 113–119; Jiang 2004: 119–139. For discussion of the cognitive unconscious, Waldron 2002b: 149–153. See Waldron and Germano in this volume.
61 Rang byung 2002: 12, verses 20–21.
62 Schmithausen comments,

> it is not surprising that *ālayavijñāna*, in order to deserve being qualified as a genuine *vijñāna*, came to be expected to satisfy the Abhidharmic definition of a *vijñāna*. This definition, which in substance can be traced back to the canonical texts, takes *vijñāna* as that which performs the act of *vi-jñā*, or, more explicitly, as that which makes known (*vijñapti*), i.e. perceives or cognizes (*upalabdhi*), an object (*viṣaya, ālambana*).
>
> (Schmithausen 1987: 85)

63 Kong sprul 1972: 24b.2.
64 Ibid.: 24b.5–25a.1.
65 Ibid.
66 Davidson 1985.
67 Kong sprul 1972: 25a.3–25a.5.
68 "Elaborating in this way, the venerable and omniscient Rangjung Dorje wrote on the essence of enlightenment in order to demonstrate as well as explain through his realization" (Kong sprul 1972: 25b.1–25b.6, verse 21).
69 Slightly deviating from the traditional Yogācāra view, Rangjung Dorje suggests that if the universal basis were the ground for saṃsāra and nirvāṇa, then it would endure after buddhahood. This is similar to Rangjung Dorje's contemporary Dolpopa Shesrab Ggyaltsan and has been equated with a zhentong (*gzhan stong*) view, that the ultimate dimension of reality is empty of everything other than enlightened qualties. See, Stearns 1999: 51–52; Schaeffer 1995: 25–36; Sparham 1993: 37, fn. 60; Dol po pa 1984. On Buddha-nature and the universal basis for awareness, see Brown 1991: 179–181; Suzuki 1959: xlii; Sutton 1991: 51–78.
70 Kon sprul 1972: 26a.1–26a.4.
71 Kongtrul quotes a passage from the *Mahāyāna-saṃgraha* (Kong sprul 1972: 26a.4–26b.4).

72 "The universal basis for awareness is transmuted into the mirror-like pristine awareness. The tainted mental awareness that abides within the universal basis is transmuted into the pristine awareness of equanimity. The fundamental mental awareness is transmuted into the pristine awareness of discernment. The five modalities of sensory awareness are transmuted in to the all-accomplishing pristine awareness" (Kong sprul 1972: 27a.2–27a.4).
73 Kongtrul quotes from a text titled, "Two Truths."
74 Kong sprul 1972: 27a.4–27b.3.
75 Mipham explains, "Since these unconditioned phenomena are inconcrete unconditioned, they are therefore exclusively objects to be known through conceptual thought and are merely mentally projected labels" (Mipham 2002: 264–265). See, Griffiths 1994: 153–173.
76 On "cognitive content" as defining awareness, see van der Velde 2004.

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# 5

# NIRVĀṆA AND NEUROSCIENCE

## The self-liberating brain

*Guy Claxton*

As I write, thousands of athletes are converging on the city of Athens for the 2004 Olympic Games. They have all spent countless hours exploring, in both theory and practice, what it is to run, jump and throw,[1] and what it takes to excel at their athletic discipline. Many of them will also know a good deal about when these activities go wrong: when swinging becomes falling, running becomes hobbling, and control crumbles into clumsiness. Indeed, you could argue that excellence at running is not possible, these days, without the best understanding of what running itself involves, and how it breaks down – as well as how it can be improved.

Buddhism says: not everyone can win a gold medal at the 1500 metres, but all of us have the potential to be excellent at life. And that potential to become an exemplary human being develops – as does running – from a blend of deep inquiry into what it is to be human, and how we fall short as persons; and skilful practice at different aspects of the art of living. Our ability to aim at buddhahood – that is, at exemplary personhood – depends upon having the best possible understanding of what it fundamentally means to be a 'person'. And on this subject, in the last few decades, the human and social sciences have made great strides. Science, for all its faults, fumbles its way towards reliable knowledge. Every scientist, however grand and respected, is always just one experiment short of having to rethink; and this humility is mirrored in Buddhism's fundamental commitment not to creed, but to painstaking, personal, first-hand enquiry. So the human sciences are worthy of our attention both for the methods they exemplify and for the insights they have accumulated.[2]

Of course, the Buddha discovered some 'timeless verities' that most of us today still struggle to realise, or even to comprehend, in our own lives. But we also know much about human minds, bodies and societies that even Buddha himself would have had difficulty understanding. He had to make do with the cultural tools at his disposal, and much of the contemporary knowledge was extremely crude, often wrong, and inextricably interwoven with pre-scientific systems of supernatural belief. Now we can do better. The current psychology of perception is in many respects an improvement on the Abhidharma. Theories of 'embodied

cognition', pioneered by such transdisciplinary scholars as Francisco Varela, George Lakoff and Andrew Clark, shed new light on doctrines like 'co-dependent origination' that have become, over the centuries, inflexible and abstruse, encrusted with layers of scholarship that the average Buddhist student today may gain little benefit from trying to unpick.

In this chapter, I shall start with a scientific perspective, and work my way back to spirit and soteriology, trying, as Einstein advised, to 'make everything as simple as possible – but not more so'. I shall ask what science can tell us about what it is to be a 'person', What is it *essentially*; and how is that essence developed, distorted and overlaid through learning? And can science illuminate the processes of 'unlearning', or 'disidentification', through which any dysfunctional habits of mind can be reversed or transcended?

## The four layers of personhood

> Tunes or pebbles, processes or substantial things? 'Tunes' answers Buddhism and modern science. 'Pebbles' say the classical philosophers of the West. Buddhism and modern science think of the world in terms of music. [But] the image that comes to mind when one reads the philosophers of the West is a figure in a Byzantine mosaic, rigid, symmetrical, made up of millions of little squares of some stony material and firmly cemented to the wall of a windowless basilica.
>
> (Aldous Huxley)

Though science strives to do without pedantry it cannot do without distinctions, and it helps, in understanding personhood, to talk on four different levels. These levels, fortuitously, correspond to four different senses of the word 'mind': senses which, as we shall see, have often been confused. The first is the functional level: what are persons up to? What is our fundamental design specification? Deep down, what matters to us? This 'motivational' aspect of persons corresponds to an everyday meaning of the word 'mind' which often gets ignored in learned discourse. Mind can be a verb which means 'to care'. What we mind about is what we care about. 'Never mind' means 'don't care so much'. A child minder is someone who takes care of the child.

In the context of a discussion of Buddhism, acknowledging that 'care' sits at the very heart of personhood is important. Though the cultivation of 'equanimity', for example, is a core Buddhist intention, this cannot be taken to mean that we should learn 'to care equally' about everything, for a creature without built-in attachments and aversions – needs, desires, threats and preferences – would not survive for a minute. *That* we care is not the problem: it is *what* we care about, and *how* we respond when things are not going our way, that needs careful attention. I once heard a young self-professed Buddhist (on New Zealand radio) say that Buddhism, for him, meant not minding when someone died. If that is Buddhism,

I thought, he can keep it. A life without feeling, including sorrow, holds no appeal for me: it is lower and deader, not higher and more alive. And science concurs. We are inherently creatures with cares, passions and desires, and to attempt to attenuate or extinguish them *en bloc* is not enlightened but perverse. Asceticism as a life-style is a form of self-harm, just as much as burning yourself with cigarettes.[3] It is not passion that is the problem; it is the ways in which passion become curdled and coagulated in our systems. The human sciences can help us understand the motivational and emotional side of persons.

The second level at which science has developed our understanding of personhood concerns *how* we think and learn and act 'intelligently'. Intelligence, from a biological point of view, is what enables us effectively to mesh our goals and desires with the capacities we have for action, and with our sense of opportunity or occasion. As we grow, so we become highly skilled at knowing when and how to act. In learning the ways of our families and friends, and our culture, we acquire the tools and sensitivities that comprise our 'skilful means'. And this part-inherited, part-acquired 'organ of intelligence' is the second common usage of the word 'mind'. As a noun, 'the mind' is what makes us smart. People commonly use the word to refer to someone who has a 'good mind', and is thought to be knowledgeable and clever. She can figure out complicated things, make good decisions, interact appropriately and provide articulate justifications and explanations.[4] Intelligent people can 'make their minds up' and 'speak their minds'. Understanding exactly what that organ of intelligence is – where it lives, what it comprises, and how it works – is precisely what cognitive neuroscience is about.

Third, there is the level of personhood that comprises our conscious experience, our lived reality. And the word 'mind' is often used to refer to consciousness, awareness or attention. To 'bear something in mind', is to keep it in consciousness; to keep it active and 'alive'. 'Mind your step!' is a call to awareness. To be 'absent-minded' is to lose awareness and slip onto 'automatic pilot' without noticing. To turn something over in your mind is to think about it consciously. To understand persons, we have to attend to all the many facets of our consciousness: perceptions and sensations of which we are aware; images and memories and thoughts that flit across our minds while awake, and the dreams and fantasies that occupy us while asleep; moods and feelings; and those more indistinct creatures that lurk on the margins of consciousness that we call hunches, inklings, glimmerings and intuitions. This is the level at which we 'know ourselves': where we concoct stories about our lives and personalities, our cherished beliefs and our darkest fears. As we shall see, these stories may or may not correspond to what actually drives us at the two previous levels.

Finally, there are the 'supra-personal' layers of personhood: all the ways in which 'identity' refused to be confined within one isolated bag of skin. When we say the British people are of 'two minds' about whether to sign up to the Euro as their national currency, or that the board of a company 'is minded' to sell off one of its subsidiaries, we are acknowledging that persons are continually enmeshed within and constituted by wider systems: ecological, technological, social and

cultural. My liver only has the shape and function that it does because it is part of a living body, and in intimate and continuous interaction with all of its many functions. Cut it out and it immediately begins to change, lose definition, and eventually to stop working. Just so, I have the shape and thoughts and feelings that I do only by virtue of my constant interaction with the wider 'bodies' of nature and society. My personhood is fundamentally relational. The 'altered state of consciousness' of the prisoner in solitary confinement, or the hermit, is no more real, no nearer to the plain unvarnished truth of 'me' than was their social self. Indeed, in many ways, for a member of an indelibly social species, it may even be further away. Science shows (without any undue rhetoric or supernatural metaphysics) that the attempt to confine personhood to one mobile pillar of complicated biological tissue is at best a crude approximation to the truth – and commonly a self-defeating misconception.

Having one word that refers to all of these four levels does not mean that they are the same. You do not try to 'deposit money' at the 'side of a river' or in a 'wall of cloud,' though the word 'bank' refers to them all. And it is an open question – one in which cognitive scientists are very interested – as to how these four layers of personhood relate to each other. Some commonsense assumptions – so familiar as to be 'second nature' – are coming to look, under the careful scrutiny of science, increasingly dubious. Is 'mind' in the sense of the organ of intelligence the same as, or closely allied with, 'mind' in the sense of conscious experience? Descartes thought that the 'organ of intelligence' was precisely the well-lit front-office of consciousness, and he taught us that the idea of 'unconscious intelligence' was a nonsense. Where Shakespeare could have one of his characters, Achilles, say 'My mind is troubled, like a fountain stirr'd; And I myself see not the bottom of it' (*Troilus and Cressida*, III, 3), Descartes, only thirty years later, was busy severing his conscious 'mind' completely from its dark mysterious roots, and denying the latter's very existence. Contemporary cognitive science is giving us good grounds for reversing this mistake. Scientists now agree that much of our intelligent activity actually goes on outside of consciousness, and that the contents of consciousness are more partial, intermittent and often dubious, than we think.

Confusion is also caused when the first two senses of 'mind' are disconnected, and the idea of 'intelligence' is deprived of its rootedness in care and its intimate relationship to emotion, and is reduced merely to a kind of bloodless intellectual rationality. If the apotheosis of human development is seen as the cardinal or the professor, there are a great many people – and not only women – who prefer to look elsewhere for inspiration. And neuroscience agrees that it is not smart at all to see disembodied, disembedded rationality as the pinnacle of human intelligence. On the contrary, neurologist Antonio Damasio has shown that the disconnection of care and comprehension that follows certain kinds of damage to the frontal lobes of the brain is highly dysfunctional. Such patients can understand and explain complicated situations perfectly well – but they act in ways that are foolish and self-defeating, as if their rational intelligence had lost traction in the real world.[5] Psychiatrist Louis Sass has gone so far as to argue, rather convincingly, that certain

symptoms commonly associated with schizophrenia can arise because the disembodied, Cartesian form of intelligence has been developed too much.[6]

It also seems to be a mistake to ignore the supra-personal levels of personhood, and to try to confine the 'organ of intelligence' within a single envelope of skin. As my liver is to my body, so I am to the wider ecological, technological and social systems of which I am part. Take me out of my familiar ruts, routines and roles, and set me down on a Sardinian beach or in a Thai monastery and I am no longer the same 'me', At a reunion of old college friends my partner is shocked at how I metamorphose before her eyes into someone with a different sense of humour, different apparent values, even a different accent, from those she thought were 'the real me', I am so interwoven with and dependent on my laptop these days, that there is really no difference in kind, and even very little in degree, between the crashing of my hard disk and a mini-stroke. Body-ware upgrades, such as fashionable clothing or contact lenses, and mind-ware upgrades such as cell phones and personal organisers, are so plentiful these days that 'the real person' can only be seen in the context of, and as constituted by, the 'extended brain' that surrounds them.[7] It makes no more sense to try to hunt for someone's essence by stripping their friends and resources away than it does to deprive-David Beckham of his ball, his boots and his team-mates, and say '*Now* show me how great a footballer you are'. As Alan Watts used to say, the whirlpool dies if you try to take it home in a bucket; and so do we.[8]

For much of human history, it has seemed to people that they also needed to add a fifth layer to their understanding of personhood: an explicitly *spiritual* layer that mediated between the person and a supernatural realm of gods, spirits and occult forces. With their limited understanding of biological systems – what they were, and what they were capable of – it appeared impossible to account for some aspects of personhood on the basis of the mind–body complex alone. How could bodies be spontaneously alive and active? Surely some animating spirit was needed to breathe life into what in the graveyard looked like very dead matter indeed. And where did this spirit go after death? Surely 'it', whatever it was, could not just be snuffed out, but could animate another body. Where did unexpected bursts of courage or strength come from, or sudden insights and inspirations: without any sense of internal anticipation or control, surely they must be inspired from without. What about unreasonable, inexplicable or downright self-destructive impulses? Surely I could not have been responsible for such blatant or perverse stupidity, but must have been high-jacked – 'possessed' – by some malign force? When the voices I hear are so real, surely I cannot have made them up myself. And when I am – again unexpectedly – calm and wise, when I react with kindness and understanding to the man who has just spat on me in apoplectic rage: where can that goodness have come from, if not from the divine? When you get down to it, how could meat possibly 'think': the very idea is preposterous.

For a whole variety of reasons, it has seemed obvious that there had to be some kind of immaterial 'soul' to fill the explanatory gaps, and mediate between 'me' and the transcendent forces that animated and impelled me. It was inconceivable

that 'mind' in all its wonderful waywardness could just arise out of 'body'. To many, it seemed as if mind must function as a kind of personal satellite dish that was picking up the divine (or malign) broadcasts. No wonder that some kind of slippery soul-substance is found so often in different cultures, including Buddhist ones, or that it has proved so resistant to debunking. Though the doctrine of *anattā* is canonical in Buddhism, and Buddhists agree that there is no self-existing 'self', nevertheless for many there remains a subtle something that survives the death of the psychophysical body-mind system, and enables the doctrine of rebirth to survive.

However, as science has discovered more and more about the first four layers of personhood and their intricate interrelationships, and has started to clear up some of the earlier confusions and misunderstandings, so more and more of the erstwhile functions of the 'soul' have been accounted for. We know how 'life' appears as an emergent property of living systems, and we are beginning to understand how neuronal systems as complex as the mammalian brain could generate consciousness by themselves – though more of that later. Is it then possible that even the more unusual and outré facets of personhood – including, most importantly, the spiritual – could also arise from the intelligent eco-bio-social system that we are, without the assistance of any hypothetical supernatural forces or entities? Could science eventually offer an explanation for enlightenment: an account of how the human system can get itself in a tangle, and then, under the right conditions, put itself straight again? Let us now look at these four layers in a little more detail, and see how far they will take us.

## The sophistication of desire

The first layer of personhood, you recall, concerned what people care about: their motivational and emotional aspects. Science tells us that, unlike silicon-based systems – computers and so on – naturally evolved carbon-based systems – animals – are bundles of desires. Like the simpler animals, we humans have a small set of in-built goals: to find periodic nourishment and a secure habitat; to mate, and protect our young for a while; to flee from or fend off the unwanted attentions of predators; to rest and recuperate; and so on. We need air, water, food and warmth; shelter and security. We are designed to associate with our fellows, and to have sex and raise children with some of them. We prefer certain environments, nutriments and companions to others. It is a core part of our fundamental design specification that we seek and avoid, protect and escape. Up to a point, 'attachment' and 'aversion' are in our blood.

One of our in-built priorities, it seems, is to take care of others. Just as animals that have stable homes are programmed to take care of their nests and burrows, so social animals, like human beings, have evolved to take care of their social as well as their physical milieu. Up to a point, the chances of my genes surviving and reproducing are linked to the fortunes of my relatives, and of the wider community that supports its members. But only up to a point: this impulse towards care

is not over-riding. Sometimes the primate brain calculates that survival is better served by running off with the bunch of bananas than by sharing them, or by growling rather than smiling. But there are social costs of being selfish, and we know in our genes that cooperation pays dividends. Enlightened self-interest, embedded in our biology, makes us kind, generous and forgiving – at least sometimes.

Unless the demands on our own personal survival are very great, and our personal history has been badly skewed, the people we are especially kind to are our own children. They carry our genes, so this bias makes perfect evolutionary sense. And they repay the complement by inheriting, along with the DNA, a whole host of cultural habits as well. Children are born with the desire to join the social dance that surrounds them, and they are genetically equipped to do so. We know that their brains are designed to download and install the habits of speech, judgement, action and reaction that characterise the cultural milieu in which they are immersed. (Just as a newly installed software upgrade requires you to close down and restart your computer, so children too need regular bouts of sleep to help them consolidate the massive amounts of learning they are doing.)[9]

And that means they start to overlay and extend their 'natural' in-built repertoire of desires with the additional goals, interests and phobias that are being modelled by their families and 'mind-ers'.[10] They learn to want what we want, to fear what we fear, to ignore what we ignore, to be disgusted or amused by whatever disgusts or amuses us. Wanting to be accepted and loved, they are eager to learn how to fulfil – and to *want* to fulfil – any conditions that may be placed on their 'lovability' – so they play nicely with the new baby when mother is around. But also, wanting the lion's share of parental attention, they may be unable to resist the temptation to kick the new cub out of the family den when no-one else is looking. Through this social learning, they acquire new sensitivities, vulnerabilities and interests, and as they do so, their repertoire of motives expands accordingly.

Every new conditioned desire draws strength and importance from the basic, 'natural' desires on which it is parasitic; and, of course, it brings with it, as its shadow, a new threat – that I may not get what I want, or, worse, what I believe I *need*. Thus, to the basic need for security, we add the desire for affection and friendship, and thus turn indifference or isolation into things to be feared – more unwelcome possibilities to be anticipated and neutralised. The basic need for sex and procreation is culturally encouraged, for many of us, to proliferate into a lifelong concern with appearance and 'being attractive', so that a liver spot or a wrinkle becomes transformed into an enemy.

This proliferation of priorities begins to cause management problems. As with a business meeting, long agendas need careful sequencing; rescheduling may be necessary as unexpected issues and conflicts emerge; and there always has to be room for 'any other business'. Glitches occur when two incompatible desires become active simultaneously. I want the last bit of cake but I don't want to look greedy; I want to be liked by my team but I want that promotion. I want to be kind, but I don't want to be late. I want to take your hand but I'm terrified of being

rejected and looking a fool. I want to look young, and I want the leisure and self-acceptance that may come with age – so do I do my earnest, boring 20 minutes on the wretched treadmill in the spare room, or not?

## The feeling mind

The second layer of personhood, 'mind' in the sense of the 'organ of intelligence', exists to cope with these desires and entanglements. Its job is to find effective ways of pursuing goals, satisfying interests, meeting needs and avoiding threats, and it does so by discovering ever more effective ways of integrating perceptual possibilities and action capabilities with the constantly changing mixture of motives. In many respects, intelligence exists to serve motivation. From a biological point of view, the ability to understand abstruse philosophical debates and score well on contrived tests, such as IQ tests, comes very low down on the motivational scale.[11] Personhood is 99 per cent visceral, embodied – and emotional. It is the mistake of the person over-identified with their intellect to suppose that intelligence and emotion are at odds, and that the latter is a subversive nuisance. We should not allow ourselves to be fooled by those who are out of touch with their own feelings into believing that separating thinking from feeling is a good, a 'higher', thing to do.

So-called 'cognitive' scientists used to make this mistake a good deal, restricting their interest in personhood to intellectual functions such as 'memory capacity' or abstract 'problem-solving'. But not any more. Now many of them are busy putting body, motive and emotion back together again: synthesising them into a bigger, more useful picture of personhood picture of personhood. Emotions are not symptoms of malfunction; they are essential aspects of our all-round intelligence. Sure, they can go wrong, just as perception and memory can. But we have been given our emotions for a good reason – to help us live effectively – and it is not at all intelligent to make enemies of them. Here's a rough sketch of the current way of thinking about the function of emotions.[12]

We, like our animal cousins, arrive bundled with a repertoire of ways of responding when our desires are not met, our plans thwarted and our well-being threatened. When things stop going smoothly, our brains make lightning appraisals of what *kind* of threat or disruption is occurring, and activate the appropriate mind-sets and reactions. Attacked out in the open, we are instantly readied to flee, and our senses turn outward to catch a tell-tale glimpse of a hideaway, or the scent of fox. But threatened at 'home', or with our kids, we are primed not to run but to stand our ground and growl and fight. Trapped and alone, we cry out for help. Feeling sick, our system convulses and expels the invasive substance. Wounded, we hide and rest, and our senses turn inward. Faced with something strange but (provisionally judged to be) not dangerous, we tentatively prod and play and investigate, inviting it to reveal itself, and thus learn its ways and potentialities. Unable to make any quick diagnosis of these kinds, we freeze, attend and seek to gather more information about the general situation. Overwhelmed, as

a final resort, our action and perceptual systems may close down completely, leaving us paralysed and numb.

Each of these 'states of readiness' has a different conscious feel, and their distinctive subjective signatures are one aspect of what we call 'emotions'. The feeling of flight is *fear*; of defence is *anger*; of isolated inadequacy is *distress*; of sickness is *disgust*; of learning is *attraction*; and *interest*; of uncertainty is *anxiety*; of overwhelming danger or disruption is the passivity and numbness of *shock*. Just as we arrive with a basic portfolio of desires, so we have an emotional starter-kit of ways of dealing with disruption, frustration, danger and surprise. Emotions, in themselves, are never 'destructive'. They are part and parcel of the organ of intelligence doing its intelligent best to keep us alive and well. To develop an aversion to one's own fearfulness, or irritability, or sexual desire, makes as much sense as hating your own feet. Trying to run away from your feet is futile and frustrating – and so is trying to escape your own emotionality (it is, of course, equally absurd to try to run *towards* your feet – or to try to 'accept' your own emotions).

As our life agendas – our portfolios of wants and likes and aversions – become more complicated and entangled, so our emotional systems struggle to keep up. Evolution designed them to respond intermittently to particular kinds of threat. They fire us up, channel our body-minds to meet the emergency, and then stand down. But human societies, 2500 years ago almost as much as today (at least for 'sophisticates'), weave such intricate tapestries of desire in the minds of their children that these old emotional systems start to mislead, break down or blow up. As Daniel Goleman said in *Emotional Intelligence*, a system that was designed to deal with tigers now gets triggered by a minor car crash or even a critical word from a boss.[13] And when incompatible desires are concurrently, even continually, active, there is no emotional stand-down to be had. Our organs of intelligence hunt endlessly, and fruitlessly, for resolutions that will not come, and we become chronically tense and tired. No wonder we yearn for the simplicity and clarity of which we are starved, and long for care-free weekends and holidays when we can simply walk, swim and *be*. (The retreat business is booming in the West partly, perhaps, because retreats offer – demand – a holiday from the complexities of desire.)

Perhaps the most pernicious group of emotion-twisting desires and threats are those that are magicked into being by the acquisition of a personal 'identity'. Other people start the ball rolling by attributing a variety of attributes to me – and then expecting me to live up to – and within – them. When they call me 'stupid' or 'clever', 'selfish' or 'attractive', they are telling me how they expect me to behave. And behaving 'out of character' often meets with a frosty reception. So I go along with it, and eventually I buy it. But worse is to follow, when I begin to get the idea that who I am – the core of my personhood – resides in the shadowy *subject* of all these *predicates*. Bombarded (in English) by phrases like 'I want', 'I am', 'I tried', 'I decided', 'I remembered', 'I will' and so on, it becomes impossibly hard not to succumb to the illusion that 'I' actually refers to something real, persisting and instigatory – located within my skin, and largely within my consciousness.

Through this insidious narrowing of self-reference, the sub-personal and the supra-personal levels of personhood begin to be eclipsed. I lose touch with my unconscious intelligence. I start to confuse consciousness with the organ of intelligence. It is not that the organ of intelligence *becomes* conscious, that I *lose* my unconscious virtuosity; it is simply that I withdraw my 'sense of self' from that region or level of mind. I learn to neglect or overlook it. And I also lose touch with the ecological, distributed, systemic dimensions of my being. Identity shrinks to include only my body (and sometimes not even that), my character, my thoughts, my possessions and the few select other people from whom I have not retracted my connecting bond of care. The line between Me and Other becomes drawn more strongly, and I promote and defend all and only those things that lie on 'my' side of the line. And I even learn to fight with myself, whenever I notice that the facts of my existence are at odds with the fallacious image of myself as the conscious, controlling character. Not only do I split myself off – in my mind, though not in reality – from the wider systems that constitute and sustain me; I also divide myself into different pieces, siding with different bits in turn against the other. 'Why shouldn't I have a bit of fun? I owe it to myself… ' versus 'You selfish idiot; there you go again making yourself unlovable … When will you ever learn?' And so, endlessly, on.

## The art of self-defence

In the face of all this, the poor stretched organ of intelligence is never quiet. It has no stable resting place. There is always more to be gained, worried about and protected against. So how is peace ever to be achieved? Commonly, the mind falls back on the deployment of the various well-documented psychological defences, principally denial or 'tactical inattention'.[14] Drugs will do it, for a while, though at an increasingly unsustainable cost. So will throwing yourself into 'flow' situations of challenge or danger, in which the inner whirlpool of worry has to be temporarily switched off, while the mental and neural resources which it normally requires are commandeered to meet the intense demands of a challenging situation. Fighting and some computer games achieve this, as do thrilling or violent spectacles that 'take you out of yourself': dogfights, or movies like *Kill Bill* or *The Matrix*. But these too provide only a holiday. 'High', as Ram Dass said, 'is where you come down from.'[15] And as you learn new skills, and habituate to intense stimuli, so the challenges may have to become ever more extreme in order to achieve the switching-out of self-consciousness. You are in danger of becoming a distraction-addict.

However, the brain's ability to tamper with its own internal machinery enables it to achieve tactical inattention without the use of drugs or external distractions. Of special relevance here is its amazing ability to inhibit its own activity. As the sense of self becomes more firmly located in consciousness, so 'I' can give my self some peace not by finding smart ways of resolving motivational tangles, but simply by preventing the awareness of them from becoming conscious. I can draw

a veil over my own intransigent complexity by disrupting the neural conditions that would be necessary for consciousness. The trouble is, of course, that the complexity is not thereby resolved: the inner conflicts, as Freud well knew, persist outside self-awareness and threaten to break through in disguised form. And the further cost is dissociation: I become less transparent, more mysterious, to myself. The organ of intelligence itself becomes bewildered and even perverse: a paradoxical threat to my well-being, as well as being the resource with which I pursue my well-being.

But let me take a step back and explore just where this facility for self-deception comes from. Why does the brain possess this amazing ability to inhibit itself? Why did it develop its massive 'frontal lobes' whose duties largely concern inhibitory regulation of what is going on elsewhere. Inhibition may well have started at a behavioural level, when our ancestors discovered that aping other people overtly could 'give the game away'. Visible signs of our intentions – where we are looking for example – make it easier for others to read our minds, to infer what we are up to, and thus outwit us. By inhibiting the outward signs of mimicry and empathy, you can attempt to read someone else's mind without giving them access to your own, and this, so evolutionary psychologists surmise, conferred a heritable advantage in the escalatingly complex 'social arms race'.[16] The organ of intelligence, in other words, evolved to be fundamentally empathic as well as rational and emotional. From an early age we learn to make working models inside our heads of the important other people around us, so we can both cooperate and compete with them more successfully.

From the scientific point of view, selfishness is not 'bad', nor compassion 'good' of themselves: each has its place. It is balance, rhythm and appropriateness that are at stake. And it is this 'balance of mind' that may well become disturbed when the computations of desire – what to pursue, what to sacrifice, what to defer, what to deny – become impossibly complex and demanding. For example, awareness of the long-term benefit – necessity even – of maintaining social goodwill may get attenuated, and then the anti-social behaviour of the mugger, the logger, the philanderer or the corporate raider becomes unrestrained. 'Bad' or even 'evil' people, in these terms, are simply those whose brains have been conditioned to select unfortunate ways of pseudo-resolving an impossible dilemma.[17] If kindness has not been modelled for you, so you may not have had the chance to learn its ways or witnessed its value. And if your own natural generosity is abused, your organ of intelligence may begin to make unbalanced computations of profit and loss, and to generate actions that deplete (rather than replenish and enrich) the vital reservoir of social goodwill that potentially buoys us all.

So inhibition itself is a mixed blessing. It is potentially a highly effective, multi-purpose tool for enhancing the quality of life. As well as concealing intentions from others (as well as from ourselves), for example, it allows external *exploration* to become internalised. We can set up investigations in the inner 'rehearsal studio' of imagination, rather than on a public stage, and this enables

us to explore privately the possibilities that are latent in our internal models of the world, and of other people. I have never *seen* how you react when someone ignorant of established protocol takes your chair in the staffroom – but I can *imagine* (and if I am feeling charitable, warn the hapless student to move before you arrive). Neuroimaging studies of the brain show that during such mental rehearsal, the activity in the brain is only slightly less than when overt action is taking place – even though the commands to the muscles have been very much attenuated – and thus considerable learning can take place, albeit vicariously. Spiritual exercise designed to rehabilitate empathy and kindness, such as 'exchanging self with other' (when you imaginatively put yourself in someone else's shoes) rely on the same principle.

More generally, inhibition enables the brain to sharpen its own internal operations. The speed of a car becomes much more controllable when it has brakes, and the same kind of antagonistic tension between excitation and inhibition enables the activity of the brain to be channelled much more precisely, and to start and stop over much shorter time-scales. It has even been suggested recently that the frontal lobes' ability to modulate the level of inhibition is vital both to human reason and human creativity. Put simply, the 'natural' tendency of the brain is for excitation to flow from an active centre – corresponding to a word you have just heard, for example – towards its associates. When I hear 'cat', activity automatically spreads throughout the brain (like ripples from a stone thrown into a pond). Unrestrained, the different connotations of 'cat' are activated, and I don't know which ones are appropriate to current contexts and purposes. With inhibition, the context and purposes can highlight the most likely or relevant meanings by dampening down those that would look odd or implausible in this situation. Inhibition enables my brain to corral and direct its own activity, and thus to follow an extended train of thought without getting continually sidetracked.[18]

However it is precisely when the normal meanings and associations *don't* apply that we need creativity. We need to be able to look freshly, without preconceptions, and to allow those less likely patterns and connections – often in the shape of fruitful metaphors and analogies – to come to the surface. To do this, the frontal lobes have now to quieten down, *reducing* their inhibitory sharpening, and allowing the activity of different centres in the brain to bleed together, like watercolours on wet paper. To be more poetic, when inhibition is high, the brain functions like Venice, with well-defined canals. When it is low, it functions like a broad shallow river delta, in which all kinds of streams and tributaries can meander together and create unexpected patterns and currents. Thus chronic inhibition – overactivity in the frontal lobes – can keep us locked into more conventional, more stereotypical ways of thinking, feeling and acting, and we miss out on the novel, creative or humorous possibility. It is even possible that some kinds of meditation, if pursued too earnestly, and with a strongly pre-programmed view of what 'progress' and 'achievement' will look like, could lock the brain into this focused, restricted *modus operandi* (despite the fact that the practitioner *thinks* they are doing the best they can to find the way out of their motivational tangles).

As we saw earlier, neural inhibition can also underpin the phenomena of repression and dissociation. And here we have to draw into the conversation the third sense of the word mind: that of conscious experience. Much of what goes on in the brain is necessarily (and usefully) unconscious. We should be thankful that consciousness represents such a small fraction of all that is going on in us at any moment. If we were to privy to everything, we should surely be overwhelmed.[19] The mystery is not that we are unaware of so much, however; it is why and how we ever become conscious of what we do. Exploration of the 'why' must wait for another time. (Perhaps there is some relationship between consciousness and learning. What I am conscious of is what I am treating as the current object of inquiry. Unexpected things grab my attention, and they stay in the well-lit focus of attention till I see whether they are safe or not, or till I have found a way of working with them. Familiar things can be brought under the same kind of scrutiny when I am inspecting them for unrevealed possibilities or flaws.)

We still don't know exactly *how* activities of the brain become conscious. It seems that there is no particular location in the brain that corresponds to consciousness: no place where the 'Cartesian theatre', as philosopher Daniel Dennett calls it, holds its shows. However, the *duration* of activity, wherever it is, does seem to determine whether neural events become conscious or not. Stimuli in the brain that last for less than approximately half a second can affect what is going on elsewhere – they send out their ripples – but they do not become conscious in their own right, unless they are very strong. In that case we might say that the reverberations of a strong input, like those of a firmly struck bell, last for the requisite amount of time, so it is still the duration that matters. But it also looks as if consciousness requires something more subtle: a transiently stable and coherent pattern of activity that links together different areas of the brain – perhaps widely distributed – and connects them with the currently dominant set of motives and intentions. This 'dynamic core' of activity, as Gerald Edelman and Giulio Tononi have called it, is built around that set of current values in which we are most invested, and in that sense, perhaps, corresponds to the shifting 'sense of self'.[20]

Thus the brain has a simple way in which it can render aspects of its own activity unconscious. It simply disconnects them from the dynamic core. If, for some reason, it decides that the stream of consciousness is flowing in a dangerous direction, the brain can use inhibition to throw up barriers and roadblocks, and so isolate that stream from the conscious core. Medieval maps used to have signs that simply said: 'This way be dragons', and the brain has its equivalents. Just as it can learn to dam a 'natural' flow of activation that has led in the past to a slap from Mummy, so it can learn to inhibit the special kinds of activity build-up that might lead to consciousness. If I have decided to define myself as 'calm and controlled', for example, incipient feelings of panic can be dampened or disconnected so that they do not appear on the screen of consciousness – though they may still be doing their functional, emotional work by releasing adrenaline, shortening the breath, raising the blood pressure and so on. There is plenty of evidence for these kinds of physiological reactions of which we are consciously unaware.

And there is also evidence that certain anaesthetics, for example, achieve their effect by breaking up the 'dynamic core', and thus removing consciousness.

So the brain can achieve denial of anxiety, or the suppression of compassion, for example, by itself. No controlling self is needed to make this self-censoring system work. All the brain has to do is be able to learn that some of its inherent activities lead to trouble, and to switch the points on the train of thought so that it chugs happily off in a safer direction (while covering its tracks, so that there is no evidence that any such manoeuvre has taken place).

One last point about the *modus operandi* of the organ of intelligence. Inhibition is an active process. It is more like sentry duty than simply turning a switch off. The brain thus relies on two kinds of activity: excitatory, which makes other things more likely to happen; and inhibitory, which makes them less likely. One energises its neighbours; the other sedates them. Now there is some reason to believe that the amount of activity that the brain can sustain at any moment – excitatory and inhibitory put together – is limited. You cannot keep on lighting up areas of the brain, and then trying to cover some of them up, ad infinitum. Like a boy-racer's car at the traffic lights, with both the gas pedal and the brake flat to the floor, it would be likely to shake itself to destruction.

So, to put it very crudely, the more inhibition the brain has deployed – the more preoccupied it is with managing an impossibly complex portfolio of desires – the less 'free activity' there is left over to underwrite its excitatory activities. As the energy needed to hold all its preoccupations and defences in place becomes a greater and greater proportion of the total activation that is available, so the stream of consciousness may become thinner and thinner. Perception becomes greyer; emotional life more bland; physical activity more clumsy; thought more stereotyped and shallow. In an extreme paroxysm of anxiety and self-consciousness, the stream may dry up altogether, and we are left – for an instant, for a week – mentally blocked, emotionally frozen and even physically paralysed. In cases such as 'hysterical blindness', inhibition has been known to close down an entire sensory channel, in order to protect the brain from witnessing (another) traumatic scene. Less dramatically, if self-interest conflicts with care, or delight with decorum, then more of the dwindling reservoir of neural activity has to be committed to deal with the glitch – by blocking the care (and then feeling guilty) or blocking the self-interest (and then feeling resentful), and then having to suppress these feelings (which undermine my self-esteem) . . . and so on, relentlessly and exhaustingly.

The conditioned 'self', we might say, is none other than this convoluted field of irreconcilable forces, overlaid on the workings of the brain, and altering its *modus operandi*, like a computer virus. Just as a digital computer with a serial, one-thing-at-a-time architecture can be programmed to emulate a brain-like system that *looks* as if it is doing many things at once, so experience can install in the human brain a program that, when it is running, makes it *look* as if its proprietor were fundamentally selfish, or tense, or greedy, or concerned about what the neighbours might say. When the Self-System programme is switched on (i.e. when our whole complicated desire portfolio is running full blast), a massive

expenditure of energy is required to run all the neural machinery that keeps us keyed up for what counts as profit or loss, nice or nasty, good or bad, mine or yours, acceptable to awareness or not.

Like the revving car, when the organ of intelligence – the ecologically embedded, physically embodied, amazingly intricate confection of matter and energy that I am – is put under great strain by such an escalation of complexity, all of its sub-systems may suffer. Perception gets driven by the need to be constantly on the look-out for what is good or bad, yet it is bleached of colour and detail. The art of contemplation – of seeing things as they are; that is, in their beauty – atrophies. One rushes round the art gallery, keen to see the latest artist's latest show, impulsively 'liking' and 'disliking', and hardly seeing at all. One can even sit on a meditation cushion chasing after a kind of peace that never ever comes when chased. The small absurdities that make life funny – a pigeon sitting calmly on a No Waiting sign; a sun-worshipper posing ridiculously on a beach – don't get noticed at all. Muscular systems that are designed with a built-in tendency to relax when not being used are clenched to dampen a feeling or a pain, and then get stuck like that, for fear it might come back, maybe for years. Of course the muscles end up yelling – that is, until we muzzle them with an analgesic.

I have presented this crude sketch of how the conditioned brain gets itself into trouble in a fairly informal, metaphorical and sometimes even light-hearted, way. But the general picture is based on firm empirical foundations. And, of course, the real-life unhappiness created by these contortions is no laughing matter. You do not have to be a Buddhist to know that babies are hit because of it. Vast forests are felled because already-rich people have a greedy itch that they do not know how else to scratch. People die of shame, as well as ignorance. They fall asleep at the wheel because they were too worried or wired to sleep last night. People fight or have unsafe sex because, sometimes, they want to break through the drab veil of inhibition and *feel* something; while those who already feel too much (of the wrong kind of feeling) steal for the needle that will help to free them from their pain for a few hours.

Science now gives us a picture of personhood that places great emphasis on the biological, the ecological and the social. Instead of the lone sharp intellect, unsatisfactorily housed in a dumb, decaying body, we find an exquisitely intelligent and sophisticated body that creates, amongst other things, intermittent puffs of consciousness many of which are highly suspect, simplistic and self-serving. The idea that conscious experience knows more about what is going on than the largely unconscious organism-as-a-whole, and can be trusted to intervene wisely in the flow of events, has become itself highly dubious. There is a Buddhist meditation that encourages people to consider that 'I *am not* the body; I *have* a body', and one understands the value of trying to break identifications with youth, appearance and vitality which will eventually, inevitably cause suffering as injury, illness and plain old age take their toll. But one should not jump out of the frying-pan into the fire of believing that there is an 'I', separate from the body, that somehow owns it. And there are many other indications in the Buddhist scriptures

of the fact that we *are* bodies, embodied beings bound together in a wider ecological and social system, much more than we commonly think. To say that we *have* bodies is to perpetuate precisely that split between 'mind' and 'matter' which causes trouble, and which science now denies.

## Liberation

Imagine what would happen if the self-virus of conditioned goals and identities such as I have described, installed in a bio-eco-social system such as I have described, were suddenly to be switched off. What would happen at the level of goals and values; at the level of functional intelligence; at the level of conscious experience; and at the social level?

At the level of values and goals, things would immediately become clearer and simpler. Things that had seemed to matter dreadfully would be seen in a truer light: as preferences and inconveniences, not as matters of life and death. Recall Anthony Robbins' 'Two step formula for handling stress. Step1: Don't sweat the small stuff. Step 2: Remember, it's all small stuff.'[21] I am not so sure about it *all* being small stuff. As I said earlier, I do not think I want 'not to sweat' the death of a loved one. That's not the goal. But so much of it is, and we know it is. Old people sometimes say that one of the compensations of getting old is that you finally stop worrying about what people think of you. If we could induce the brain to accomplish that clear-out of its motivational cupboard, maybe we could experience that benefit sooner: being more decisive; clearer about what 'really matters'; less blocked and conflicted.

At the level of the 'organ of intelligence', we would find that a kind of 'basic sanity' reasserts itself, as our intelligence becomes less at the mercy of these emotional currents. It is not that we have to clear emotionality out of the way in order to allow a dispassionate intelligence to emerge. It is that the clarification of desire brings with it a natural lessening of emotional complexity, and thus greater wisdom. Freed of the need to appear knowledgeable and decisive, for example, the mind can take its time when dealing with genuinely complicated situations – and thus come up with smarter ways of satisfying multiple constraints. What the poet John Keats referred to as 'negative capability' – 'that is, when a man is capable of being in uncertainties, mysteries, doubts without any irritable reaching after fact and reason'. Intelligence increases when you are able to wait: especially that higher form of intelligence known as creativity.[22]

At the third level, the felt quality of experience, we might expect a number of changes. As the background sense of panic and insecurity dies away, so greater peace of mind replaces them. One feels quieter and calmer. One might experience more marked rhythms between rest and contemplation on the one hand, and decisive action on the other. Relaxation returns as the default state of mind. And, as intelligence is freed of the constant need to solve desire-related problems, so there is more opportunity to see what is really out there, rather than what you expect or hope or fear or need to be there. The perceptual world becomes sharper and richer.

And there may be another reason why this happens, too. Remember that a good proportion of the total pool of neural activity might have been dedicated to keeping trains of thought and perception 'on track' – relevant to the current knot of priorities – and that self-related defences have locked up amounts of inhibitory activity in protecting consciousness from troubling possibilities. When all this self-protection stops being necessary – like the end of a war – suddenly all these sentries can stand down. They are freed from their need to be vigilant for specific threats, and are able instead to subserve richer, more detailed perception of whatever arises. No wonder people often report bursts of physical energy and perceptual richness and brightness.[23]

And at the social-ecological level, as those barriers and defences melt away, how could there not be an expansion of the sense of self; a feeling of connection and belonging. Wherever I am, I am freed to remember that this is *my* living room; these are 'my people'; their well-being is my well-being. I *belong* – and so I can stop longing to! I am reconnected not with some kind of higher moral purpose, but with an expanded sense of my own personhood, in which I am built to care as well as to compete. Unless my own basic needs are genuinely threatened – I am exhausted, famished or being attacked – suppressed care ('I'd like to help but I just don't have the time, sorry') floats back to the top of the priority-list, and it is perfectly natural for me to do what needs to be done for the common good, and to ask 'How can I help?' Love and compassion may be words that are too grand for this natural feeling of care and kinship.

## Finding uses for spare capacity

Those of us lucky enough not to be homeless, imprisoned or starving thus find ourselves (much of the time) with spare capacity: reserves of intelligence that are no longer needed to serve the demands of the self-system. Like Marvin the Paranoid Android, in Douglas Adams' wonderful *Hitch-Hiker's Guide to the Galaxy*, we can respond to this by sitting around feeling depressed and under-used. ('What's up, Marvin?' 'I don't know... I haven't been there'.) Or we can occupy ourselves in four rather more productive ways. We can look around and see what needs to be done. We can dance and sing and paint and invent, making creative use of our surplus intelligence. Or we can laugh – for innocent humour, and a delight in absurdity and ambiguity, are surely the efflorescence of enlightenment.

Buddha must have laughed a lot; I like to think, and Jesus must have surely had a ready smile. What fun it must have been to talk with Mohammed. Yet humour often dies on the page. And those who become leaders of churches and sects, after the founder has gone, have often been more political and literal by temperament, and too busy establishing 'The Truth' to register the gentle subtleties of humour and irony. Small wonder that the lightness gets airbrushed out of the scriptures and the liturgy. Yes: remember that we are so lucky to be free and well-favoured, and that death comes without warning. But remember too that seriousness is not

the same as earnestness or solemnity, and that the reason why the angels can fly is because they take themselves so lightly.[24]

And the fourth way of making good use of our spare capacity is through learning and inquiry, especially through putting the taken-for-granted under the microscope of our own attention, turning up the magnification and seeing what comes to light. The cultivation of mindfulness is often seen as a way of inducing a quieter brain, and indeed it is. The brains of experienced mindfulness practitioners show reduced activity in the frontal lobes, which may well reflect a reduction in the amount of desire-led planning, management and vigilance that is required.[25] Less inhibitory control is needed to make sure that the stream of consciousness keeps going *here*, and does not go *there*.

But meditation can also provide the context for the kind of investigation into taken-for-granted habits and beliefs that is called vipassana. Meditation practice often involves the development of complementary skill. One learns: to loosen involuntary inhibitory control (and cultivate mental and emotional poise in the face of whatever then arises). But also one sharpens the ability to stop the incessant movement of consciousness, which makes it difficult to see just what is going on in one's own mind, and to pin a particular mental habit or belief in the quizzical spotlight of awareness. The knack of 'mindfulness' allows unskilful patterns of thought to emerge from the shadows The knack of 'one-pointedness' allows them to be subjected to scrutiny, so that their antecedents and consequences can be clearly seen.

And woven into meditative experience, if we are lucky, brief passages of quiet brain time may begin to appear. But mostly these come to all-too-quick an end, and old habits of inflating 'preferring' to 'needing' reassert themselves. How to make ourselves more prone to these happy accidents is one question; how to stretch and stabilise them is another. And learning the knack of being able to turn the quiet power of attentive learning back on ourselves may the means to both these ends. The habit of contemplation both keeps us out of mischief, and also serves to loosen the power of other old habits, and thus make our minds – at every level – more hospitable places for peace, fun, kindness and creativity.

## Notes

1 And dive and shoot and tumble and so on.

2 'Buddhas say emptiness is relinquishing opinions. Believers in emptiness are incurable'. Nāgārjuna, translated by Stephen Batchelor, *Living with the Devil*, Riverhead: New York, 2004.

3 Asceticism as a temporary practice, a form of spiritual exercise or corrective therapy, is of course a different matter. When you have a bad back, sleeping on a board for a week may be beneficial. Deciding that a hard bed is good for your soul is simply masochistic (or, as Buddhists say, when you have crossed the river, it is smart to leave the boat behind). One of the reasons why people deliberately cause themselves pain and injury is precisely because they want to escape from that kind of unbearable 'equanimity' that clinicians call 'flattening of affect'.

4 If the use of the female pronoun surprises, that may just go to show what a stereotypically male view of the mind *qua* 'organ of intelligence' we have been socialised into.
5 Antonio Damasio, *The Feeling of What Happens*, William Heinemann: London, 1999.
6 Louis Sass, *The Paradoxes of Delusion*, Cornell University Press: Ithaca, NY, 1994.
7 Thanks to Andy Clark in *Natural Born Cyborgs* (Oxford University Press: Oxford, 2003) for some of these vivid examples and turns-of-phrase.
8 Alan Watts, *The Wisdom of Insecurity*, Rider: London, 1974.
9 Though human brains are in many ways unlike computers, I hope I can get away with the occasional quick metaphor!
10 See, for example, Michael Tomasello, *The Cultural Origins of Human Cognition*, Harvard University Press: Cambridge, MA, 1999.
11 See, for example, Ken Richardson, *The Making of Intelligence*, Weidenfeld and Nicholson: London, 1999.
12 What follows is a development of the kind of approach that one finds in, for example, Keith Oatley, *Best Laid Schemes: The Psychology of Emotions*, Cambridge University Press: New York, 1992.
13 Daniel Goleman, *Emotional Intelligence*, Bloomsbury: London, 1996.
14 Daniel Goleman, *Vital Lies, Simple Truths: The Psychology of Self-Deception*, Simon and Schuster: New York, 1985.
15 Ram Dass, *Be Here Now*, Hanuman Foundation: Boulder, CO, 1978.
16 See Nicholas Humphrey, *A History of the Mind*, Chatto and Windus: London, 1992.
17 This does not, of course, mean that it is either morally wrong or practically ineffective to try to get their brains to compute in a different way by punishing them.
18 Colin Martindale, 'Creativity and connectionism', in S. M. Smith, T. B. Ward and R. A. Finke (eds), *The Creative Cognition Approach*, Bradford/MIT Press: Cambridge, MA, 1995, pp. 249–267.
19 As some unfortunate people are by synaesthesia, for example, when every small event sets off an uncontrollable multisensory fireworks display of associations in consciousness. See A. R. Luria's classic *The Mind of a Mnemonist*, Penguin: Harmondsworth, 1966.
20 Gerald Edelman and Giulio Tononi, *Consciousness: How Matter Becomes Imagination*, Penguin: London, 2000.
21 Quoted in Susan Hayward, *Begin it Now*, In-Tune Books: Sydney, Australia, 1987.
22 The evidence behind this paragraph is summarised in two of my books: *Hare Brain, Tortoise Mind: Why Intelligence Increases When You Think Less* (Fourth Estate: London, HarperPerennial: San Francisco, CA, 1999), and *Be Creative* (with Bill Lucas, BBC Books: London, 2004).
23 See William James, *The Varieties of Religious Experience*, Dover: New York, 1958; John Ferguson, *An illustrated Encyclopaedia of Mysticism*, Thames and Hudson: London, 1976; Guy Claxton, 'Neurotheology: Buddhism, cognitive science and mystical experience', in Gay Watson, Stephen Batchelor and Guy Claxton (eds), *The Psychology of Awakening: Buddhism, Science and Our Day-to-day Lives*, Samuel Weiser: York Beach, ME, 2000, pp. 30–39.
24 Many of the scriptures, of course, are not intended to be biographies; they are designed to distil essential teachings and methods of practice. For an indication of the Buddha's humour, see Richard Gombrich's chapter titled Metaphor, Allegory, Satire, in his *How Buddhism Began*, Munshiram Manoharlal: New Delhi, 1997.
25 See Susan Blackmore, *Consciousness: An Introduction*, Hodder and Stoughton: London, 2003, for a review of these studies.

# 6

# VACUUM STATES OF CONSCIOUSNESS

## A Tibetan Buddhist view

*B. Alan Wallace*

### Introduction

In the early Theravāda Buddhist view, the *bhavaṅga*, literally, the "ground of becoming," may be characterized as a relative vacuum state of consciousness, voided of all manner of mental activity known as *javana*. This appears to be identical to the substrate consciousness (*ālayavijñāna*) asserted in the later Great Perfection (Dzogchen) school of Tibetan Buddhism. This state of consciousness is presented not simply as a philosophical speculation but as an experienced mental phenomenon that can be accessed through the achievement of meditative quiescence (*śamatha*). According to the Great Perfection school, primordial consciousness (*jñāna*) may be regarded as an ultimate ground state of consciousness, and it can allegedly be ascertained non-dually through the cultivation of contemplative insight (*vipaśyanā*). These relative and ultimate vacuum states of consciousness bear remarkable similarities with the definitions of relative and absolute vacuum states of space presented in contemporary physics. The Buddhist and scientific views may be regarded as complementary, each having its own strengths and weaknesses.

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Twenty-five hundred years ago, the Hebrew people were living in exile in Babylon, with their prophets crystallizing their religious faith and belief in the one true God. In doing so, they were creating the paradigm for what we in the West now call *religion*. During the same period, the first Greek pre-Socratic thinkers on the Ionian coast of Asia Minor were emphasizing the use of speculative reason in the quest for the one fundamental stuff underlying the physical world. In doing so, they were laying the foundations for what we now call *philosophy* and *science*. In the meantime, another way of exploring reality was emerging in India that has played at most a peripheral role in the West, but which has the potential to

provide an important bridge between religion, on the one hand, and science and philosophy on the other.

In the midst of this diverse social milieu, a loose-knit movement of counter-cultural contemplatives (*śrāmaṇas*) emerged, consisting of individuals who were primarily interested in fathoming by means of direct experience the nature and potentials of consciousness and its relation to the lived world of experience (*loka*). Their primary means for exploring the mind was first subjugating the passions, then developing advanced degrees of meditative concentration (*samādhi*). Considering their focus on spiritual liberation (*mokṣa*), we might regard this movement as a religious reformation; or, given their emphasis on observation, experimentation, and reason, it could be deemed a scientific revolution. But I find it more fitting to call it a Noetic Revolution, drawing from the Greek term *noetos*, referring to the cognitive faculty that apprehends non-sensuous phenomena.

The Buddhist exploration of the mind and the rest of the natural world began with Siddhartha Gautama, but it did not end with him. Since his time, a hundred generations of Buddhist contemplatives have engaged in their own investigations, following his themes of pragmatism, skepticism, empiricism, and rationalism. Out of these centuries of inquiry has emerged a theory of consciousness that first of all distinguishes between mental activity, called *javana*, and the mental ground out of which such activity emerges, known as the *bhavaṅga* (Harvey 1995). The early Buddhist term *javana* refers to all types of active mental processes, including sensory perceptions, discursive thoughts, memories, intentions, desires, and imagination. These are the dynamic processes of the space of the mind, many of which can be observed by means of mental perception.

The cognitive basis of all mental activities and sensory perceptions is the *bhavaṅga*, literally, *the ground of becoming*, which supports all kinds of *javana*, as the root of a tree sustains the trunk, branches, and leaves (Bareau 1955: 72). This is the resting, ground state of consciousness, withdrawn from the physical senses. While all mental and sensory processes are *conditioned* by the body and the environment, in the Buddhist view they actually *emerge* from the *bhavaṅga*, not the brain. Described as the natural, unencumbered state of the mind, its innate radiance and purity are present even when the mind is obscured by afflictive thoughts and emotions (AN.1.8–10). The *bhavaṅga* may be characterized as a vacuum state of consciousness, voided of all manner of *javana*. Generally speaking, it is indiscernible while the mind is active, for it normally manifests only in dreamless sleep and during the very last moment of a person's life. Indeed, the Buddha declared that there are multiple similarities in the cognitive processes while falling asleep and dying (DN.2.334).

To unlock this natural purity and luminosity of consciousness so that its radiant potential is revealed, one must calm the involuntary activity of the mind through the practice of meditative quiescence (Wallace 1998, 1999: 175–187). In this way, one can see through the superficial turbulence of the mind into its limpid depths. In the Buddhist view, the *bhavaṅga* acts as the basis for all volitional states of consciousness, and thus for *karma*; and it is therefore the basis for the emergence

of the world experienced by each individual. Moreover, in the Buddhist view, since there is no independent individual existing apart from the world that one experiences, the *bhavaṅga* serves as the nondual source of creation of each person's *experienced-world-and-its-experiencer*.

The earlier account of *javana* and the *bhavaṅga* is based on the Buddha's discourses recorded in the Pāli language and their earliest commentaries. A remarkably similar description of the ground state of consciousness appears in the later Great Perfection (Dzogchen) school of Tibetan Buddhism. Here a distinction is made between the substrate (*ālaya*) and the substrate consciousness (*ālayavijñāna*). Tibetan contemplatives describe the substrate as the objective, empty space of the mind. This vacuum state is immaterial like space, a blank, unthinking void into which all objective appearances of the physical senses and mental perception dissolve when one falls asleep; and it is out of this vacuum that appearances re-emerge upon waking (Düdjom Lingpa, 46).

The subjective consciousness of this mental vacuum is called the *substrate consciousness*. In the natural course of a life, this is repeatedly experienced in dreamless sleep and finally experienced in the moment before death. A contemplative may consciously probe this dimension of consciousness through the practice of meditative quiescence, in which discursive thoughts become dormant and all appearances of oneself, others, one's body and one's environment vanish. At this point, as in the cases of sleeping and dying, the mind is drawn inwards and the physical senses become dormant. What remains is a state of radiant, clear consciousness that is the basis for the emergence of all appearances to an individual's mind-stream. All phenomena appearing to sensory and mental perception are imbued with the clarity of this substrate consciousness. Like the reflections of the planets and stars in a pool of limpid, clear water, so do the appearances of the entire phenomenal world appear within this empty, clear substrate consciousness. Contemplatives who have penetrated to this state of consciousness describe it as "an unfluctuating state, in which one experiences bliss like the warmth of a fire, luminosity like the dawn, and nonconceptuality like an ocean unmoved by waves" (Ibid.: 19).

The above description can easily be misinterpreted as an expression of philosophical idealism. However, these contemplatives are not claiming that the entire universe is of the nature of the mind, only that one's individual world of appearances arises from this substrate consciousness. Moreover, the qualities of bliss, luminosity, and nonconceptuality associated with the realization of the substrate consciousness have led many contemplatives to mistake this for the ultimate nature of reality, or nirvāṇa. But simply dwelling in this relative vacuum state of consciousness does not liberate the mind of its afflictive tendencies or their resultant suffering. By fathoming the nature of the substrate consciousness, one comes to know the nature of consciousness in its relative ground state. This realization, however, does not illuminate the nature of reality as a whole. It is also important not to confuse this substrate consciousness with a collective unconscious, as conceived by Carl Jung. Buddhist accounts of the substrate consciousness all

refer to it as an *individual* stream of consciousness that carries on from one lifetime to the next.

The Buddhist tradition claims that the *appearances* to our senses do not exist in external, physical space, independent of perception. Likewise, the *objects* that make up our experienced world, each of them imbued with sensory attributes, such as color, taste, smell, and texture, are not to be found in the objective space described by modern physics. But within the context of our experienced world, it is conventionally valid to say that the physical objects we perceive in the world around us, such as planets and stars, exist within the external, intersubjective space of consciousness; and the mental objects we perceive, such as thoughts and mental images, exist in the internal, subjective space of the consciousness of each individual.

Neuroscientists commonly assume the human brain exists in the real, objective space of physics, but all their sensory images and concepts of the brain appear in the space of consciousness. Moreover, all the *sensory images* of space experienced by physicists arise within the external space of their consciousness, and all their *concepts* of space emerge within the internal space of consciousness. Although we may believe in the existence of space independent of consciousness, all our concepts of such real, objective space arise within the space of consciousness. As for the relation between sensory images and their related six objects believed to exist in the objective world independent of consciousness, neurologist Antonio Damasio acknowledges, "There is no picture of the object being transferred from the object to the retina and from the retina to the brain" (Damasio 1999: 321). To generalize, the appearances to our senses are not replicas, or re-presentations, of phenomena in objective, physical space. They are fresh creations arising in the space of consciousness. Likewise, our concepts of space and the objects within it are not replicas of anything existing independently of the mind. In short, the brain believed by neuroscientists to exist in real, objective space is as devoid of consciousness as is the physical space conceived of by physicists.

Neither the external space of the physical senses nor the internal space of the mind exists in the brain, nor are any of the *contents* of such external or internal space located inside the head. Within the context of the experienced world, the demarcation between external and internal space is one of convention, not absolute reality. We may experience mental images, for example, not only in our "mind's eye," with our eyes closed and our attention withdrawn from the physical world. We may also superimpose mental images on our sensory fields of experience. For example, we may imagine the face of a man on the moon or an archer outlined in a configuration of stars.

Does the face or the archer we imagine exist in internal space or external space? They are free creations of the mind, yet they appear to be in external space; but that external space may be singularly subjective, not intersubjectively experienced by all competent observers. On the other hand, when we turn our attention inwards and focus on a mental image of the moon, the image we perceive mentally may be virtually identical to other people's mental images of the moon. While

occurring in the internal space of our minds, it is more intersubjective than the images we externally superimpose on the constellations. In short, there is nothing inherently external or intersubjective about external space, nor is there anything inherently internal or private about internal space. While we commonly speak of directing the attention outward to the physical world or inward to the mind, this distinction is only conventional. Our experience presents us only with the nondual space of consciousness, in which the distinctions between outer and inner are artificially superimposed by concepts and language.[1]

In the Great Perfection tradition of Tibetan Buddhism, the nonduality of external and internal space is called the *dharmadhātu*, or absolute space of phenomena. Out of this space emerge all the phenomena that make up our intersubjective experienced world. All appearances of external and internal space, time, matter, and consciousness emerge from the *dharmadhātu* and consist of nothing other than configurations of this absolute space. While the relative vacuum of the substrate can be ascertained by means of the cultivation of meditative quiescence, the absolute vacuum of the *dharmadhātu* can be realized only through the cultivation of contemplative insight (HH the Dalai Lama 2000). The mode of awareness with which one ascertains this absolute space is called *primordial consciousness (jñāna)*, which is the ultimate nature of all individual continua of consciousness.

The experiential realization of absolute space by primordial consciousness transcends all distinctions of subject and object, mind and matter, indeed, all words and concepts. Such insight does not entail the meeting of a subjective mode of consciousness with an objective space, but rather the nondual realization of the intrinsic unity of absolute space and primordial consciousness. The *dharmadhātu* and primordial consciousness are coterminous, nonlocal, and atemporal. While the *dharmadhātu* is the fundamental nature of the experienced world, primordial consciousness is the fundamental nature of the mind. But since the two have always been of the same nature, the view of the Great Perfection is not one of philosophical idealism, dualism, or materialism. All such distinctions between subject and object, mind and matter are regarded as mere conceptual fabrications.

The unity of absolute space and primordial consciousness is the Great Perfection, often referred to as the "one taste" of all phenomena and the "purity and equality of the whole of saṃsāra and nirvāṇa." The previously discussed substrate consciousness may be called a relative, or false, vacuum state of consciousness, for it is different from the substrate which it ascertains; it is qualified by distinct experiences of bliss, luminosity, and nonconceptuality; it is ascertained when the mind is withdrawn from the external world; and it is bound by time and causality. Therefore, despite its vacuity, it has an asymmetrical, internal structure. The unity of absolute space and primordial consciousness, on the other hand, is the absolute, or true, vacuum. Although it, too, is imbued with the qualities of bliss, luminosity, and nonconceptuality, these are not present as distinct attributes but as an ineffable unity. This absolute vacuum is fathomed while letting consciousness come to rest in a state of nonduality, open to the entire

universe. Devoid of all internal structure, it embodies a unique, absolute symmetry that transcends relative space, time, mind, and matter.

The substrate consciousness may be characterized as the relative ground state of the individual mind, in the sense that, within the context of an individual mind-stream, it entails the lowest possible state of activity, with the highest possible potential and degree of freedom or possibility. For example, once an individual stream of consciousness has been catalyzed from its own substrate in dreamless sleep, it can freely manifest in a vast diversity of dreamscapes and experiences. Such exceptional creativity is also displayed while under deep hypnosis, which also taps into the substrate consciousness. But this potential is most effectively accessed when one lucidly penetrates to the substrate consciousness by means of meditative quiescence. In this case, one is vividly aware of the substrate, in contrast to the dullness that normally characterizes dreamless sleep. Buddhist contemplatives report that such fully conscious realization of the relative ground state of consciousness opens up a tremendous wellspring of creativity, which is largely obscured in the normal experiences of the substrate while sleeping or dying.

Primordial consciousness, on the other hand, may be characterized as the absolute ground state of consciousness. This state of perfect symmetry entails the lowest possible state of mental activity, with the highest possible potential and degree of freedom in the universe. In the limited, relative vacuum of the substrate – as in the case of deep sleep – mental events specific to one individual emerge and dissolve back into that subjective space of consciousness. But all phenomena throughout time and space emerge from and dissolve back into the timeless, infinite vacuum of absolute space.

When one realizes the substrate consciousness by achieving meditative quiescence, mental afflictions are only temporarily suppressed, but as a result of realizing primordial consciousness, it is said that all mental afflictions and obscurations are eliminated forever. Likewise, the bliss that is experienced when resting in the relative ground state of consciousness is limited and transient, whereas the inconceivable bliss that is innate to the absolute ground state of primordial consciousness is limitless and eternal. By ascertaining the substrate consciousness, one realizes the relative nature of individual consciousness, but in the realization of primordial consciousness, the scope of one's awareness is said to become limitless. Likewise, the creative potential of consciousness that is accessed through meditative quiescence is limited, whereas that which is unveiled through such ultimate contemplative insight allegedly knows no bounds. Thus, in reference to this absolute ground state of consciousness the Buddha declared, "All phenomena are preceded by the mind. When the mind is comprehended, all phenomena are comprehended. By bringing the mind under control, all things are brought under control."[2]

The above uses of the terms *relative* and *absolute vacuum* are not found in Buddhist literature, though I am confident that this presentation does not distort traditional Buddhist accounts of the substrate, substrate consciousness, the absolute space of phenomena, or primordial consciousness. I have borrowed these

terms from modern physics, and in so doing I invite a comparison between scientific and Buddhist concepts of vacuum states of space and of consciousness. In physics, a vacuum is commonly defined as the lowest possible energy-state of a volume of space, and this definition can be applied to numerous other systems, such as an electric charge embedded in space. I have taken this definition and applied it to consciousness.

A false vacuum is one that is not utterly devoid of energy, but it is the lowest possible energy-state under present circumstances. Such a vacuum has energy and structure and is therefore not perfectly symmetrical. Any configuration of mass–energy, including light itself, is viewed by physicists as an excitation of empty space, or more accurately, as an oscillation of abstract field quantities in space, not an oscillation of space itself. The fluctuating masses in a vacuum are regarded metaphorically as "frozen energy," and they cause a curvature of space, such that the distances between two points in space also fluctuate. Physicist Henning Genz writes in this regard:

> Real systems are, in this sense, "excitations of the vacuum" – much as surface waves in a pond are excitations of the pond's water… the properties of the physical vacuum define the possible excitations – the possible systems that can emerge from the physical vacuum… The vacuum in itself is shapeless, but it may assume specific shapes. In doing so, it becomes a physical reality, a "real world."
>
> (Genz 1999: 26)

Scientists do not have a clear idea of the true vacuum – of whatever remains once they have removed from some well-defined space everything that the laws of nature permit them to take away. The reason is that this depends on the laws of nature – *all* of them, including those that scientists have not yet discovered. In the frozen, or false, vacuum, quarks, electrons, gravity, and electricity are different, whereas in the perfect symmetry of the true, or melted, vacuum, which is devoid of any internal structure, they are undifferentiated. According to science writer K. C. Cole

> The closest we can probably come to imagining perfect symmetry is a smooth, timeless, featureless empty space – the proverbial blank slate, the utter silence. It can't be perceived because nothing can change. Everything would be one and the same; everything would be the same, as far as we could tell, as nothing.
>
> (2001: 244)

The evolution of the universe, according to some cosmologists, started with the perfect symmetry of the true vacuum, which cooled into our current frozen vacuum state, which may one day melt down again. This release of energy may

explain the origination of the Big Bang. Cole writes in this regard

> Like water freezing into ice and releasing its energy into its surroundings, the "freezing" of the vacuum liberates enormous amounts of energy . . . As simply as water freezing into ice, the inflated vacuum froze into the structure that gave rise to quarks, electrons, and eventually us.
>
> (Ibid.: 177–180)

And Genz suggests

> Maybe quantum mechanical fluctuations initiated not only the *stuff* our world was made of prior to inflation but also space-time itself. Maybe the true *vacuum*, the true *nothing*, of philosophy and religion should be seen as a state wholly innocent of laws, space, and time. This state can be thought of as nothing but a collection of possibilities of what might be.
>
> (Genz 1999: 312)

The earlier views concerning the role of the true vacuum of physical space in the formation of the universe bear a remarkable similarity with Buddhist views concerning the relation between the absolute space of phenomena and the relative world of space and time, mind and matter. In his recent book on the Great Perfection, the Dalai Lama writes

> Any given state of consciousness is permeated by the clear light of primordial awareness. However solid ice may be, it never loses its true nature, which is water. In the same way, even very obvious concepts are such that their "place," as it were, their final resting place, does not fall outside the expanse of primordial awareness. They arise within the expanse of primordial awareness and that is where they dissolve.
>
> (HH the Dalai Lama 2000: 48–49)

While physicists have devised their theories of the true and false vacuums on the basis of physical experiments and mathematical analysis, Buddhists have formulated their theories of true and false vacuum states of consciousness on the basis of contemplative experience and philosophical analysis. Both traditions place a high priority on empirical investigation and rational analysis, but their starting assumptions and modes of observation are profoundly different. The scientific Revolution began with the assumption that an external God created the world prior to and independently of human consciousness. Physicists then set themselves the goal of perceiving that objective universe from a God's-eye perspective and formulating its laws in terms of God's own language, which they thought to be mathematics. Since they were focused on the realm of objective space and its contents that exist independently of consciousness, it was quite natural for them

to marginalize the role of mind in nature; and their theories of the true and false vacuums naturally make no reference to consciousness.

Indeed, advocates of this mechanistic view have assumed from the outset that consciousness plays no significant role in the universe. As Antonio Damasio proclaims, "Understanding consciousness says little or nothing about the origins of the universe, the meaning of life, or the likely destiny of both" (Damasio 1999: 28). Such confidence is remarkable in light of the fact that neuroscientists have not yet discovered the nature or origins of consciousness. In the meantime, many neuroscientists share what Damasio calls his "one goal and one hope," namely to formulate a comprehensive explanation for how the sort of neural patterns that can be currently described with the tools of neurobiology, from molecules to systems, give rise to states of consciousness (Ibid.: 322). Such researchers commonly assume that they already *know* that consciousness has no existence apart from the brain, so the only question to be solved is *how* the brain produces conscious states. This assumption is an instance of what historian Daniel Boorstin calls an "illusion of knowledge." It is these, he proposes, and not mere ignorance, that have historically acted as the greatest impediments to scientific discovery (Boorstin 1985: xv).

The significance of the vacuum states of physical space and of consciousness can hardly be overestimated. Physicist John March-Russell declares, "The current belief is that you have to understand all the properties of the vacuum before you can understand anything else" (Cited in Cole 2001: 235). Physicists have not yet fathomed all the properties of the vacuum or all the laws of nature, but they have widely assumed that consciousness is irrelevant to the universe they are trying to understand. Insofar as the universe conceived by physicists exists independently of consciousness, Buddhists may counter that such a universe is irrelevant to the world of human experience, in which consciousness plays a crucial role. Neither the scientific nor the Buddhist view of the vacuum is complete. Rather than viewing the modes of inquiry of these two great traditions as incompatible, it may be more fruitful to regard them as complementary. Like focusing two eyes on the same reality, with the integration of these two perspectives, we may discover a deeper and more encompassing vision than either tradition has achieved on its own.

## Notes

1 For more elaborate discussions of this theme, see B. Alan Wallace (2000) *The Taboo of Subjectivity: Toward a New Science of Consciousness*, New York: Oxford University Press, pp. 62–67, 110–117; William James (1912/1976) *Essays in Radical Empiricism*, Cambridge, MA: Harvard University Press.

2 *Ratnameghasūtra*, cited in Śāntideva's *Śikṣāsamuccaya*, P. D. Vaidya (ed.) (1961) Darbhanga: Mithila Institute, p. 68.

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# 7

# THE CO-EMERGENCE OF THE KNOWER AND THE KNOWN

## A comparison between Madhyamaka and Kant's epistemology

*Michel Bitbol*

### Introduction: comparing philosophical positions

Comparison between a Western and an Indian philosophy (especially a Māhāyana Buddhist philosophy) is often a delicate matter. An acute problem of *translation* is involved. Not only verbal, but also conceptual translation. And not only *intellectually* conceptual, but also, so to speak, *existentially* conceptual: the "form of life" within which the propositions and concepts of each philosophy are put to work must imperatively be taken into account when the translation is carried out. An extended version of Davidson's "charity principle" is, therefore, needed. One should not be content with maximizing the *truth* of the translated propositions. One must rather find what is the use and relevance of these translated propositions, in the framework of each integrated system of values and purposes.

A parallel between Kant's philosophy and Madhyamaka's is just as risky as any other similar comparison. Some attempts in this direction were made in the past,[1] but they were extensively criticized,[2] often with impressive arguments. Fortunately, the reason for this relative failure can easily be fathomed. The comparison was made artificial because it was itself developed according to the standards of a definitely non-Madhyamaka (and presumably non-Kantian) prejudice about what "is" a philosophical position. Along with this prejudice, a philosophical position is classed as a "doctrine," with an autonomous "essence," and a closed set of coherent declarative propositions aiming at some intemporal and universally acceptable truth. It then proves quite easy to demonstrate that virtually every similarity between concepts of the two philosophies is deceitful, because the alleged "essences" of the doctrines, their basic presuppositions and targets, are thoroughly different. Other comparisons sometimes appear more appropriate, such as that between Madhyamaka, on the one side, and either Pyrrhonian skepticism or Wittgensteinianism, on the other side. But, with some remarkable exceptions,

these alternative parallels usually do not address the basic issue about the nature of a philosophical position either.

Here I wish to develop the comparison between Kant and Madhyamaka under an alternative view of philosophical positions. Actually, rather than a view, it is a cluster of non-conventional views I am adopting. This cluster of perspectives about philosophical positions can be divided into two subsets.

The basic tenet of the first subset of non-conventional views is that a philosophy should not be taken literally as a set of assertions, but rather as an interconnected *performative* instrument. It does not (at least not only) *say* something, but rather invite the reader (or the listener) to *do* something, to adopt a certain attitude, or to change his/her way of "seeing-as" and even "being-as." Two recent propositions in this direction are Goodman's and Van Fraassen's.

N. Goodman pointed out, in reply to some of his opponents, that it is sometimes legitimate to state a philosophical idea without any argument. Why is it so? Because very often, he declares, a philosophical idea is not itself a belief or a thesis. It is, rather, a "categorization, or scheme of organization"[3] which conditions in advance any future belief or thesis, and which also sets the frame for actions and attitudes. In other terms, a philosophical position is usually not tantamount to a move in the game, but rather to a proposed change of the rules of the game.

Similarly, Van Fraassen tried to formulate a conception of philosophical positions in such a way that it would be homogeneous to his version of empiricism. To him, "a philosophical position need *not* consist in holding a dogma or a doctrine."[4] But in this case, what *is* a philosophical position? Van Fraassen's guiding thread towards an answer to this question was a self-consistent reflection he developed about his own philosophical position. What he sought was an empiricist view of the nature of empiricism. His conclusion was that empiricism is not a thesis but a "stance": a stance of bridled rationality, of admiration for the *methods* of science yet of critical scrutiny of its *claims*. By generalizing the former remark, any philosophical position can be construed primarily as a *stance*.

With such construals of philosophy in mind, one would soon find similarities, but also glaring dissimilarities in the Kantian and Madhyamaka "stances." The major similarity in attitude consists in a common suspicion towards reifying tendencies in philosophy. The discursive expression of this mistrust is a systematic attempt at deconstructing basic cognitive illusions by means of an inventory of the antinomies of reason. The transcendental illusion, in Kant's *Critique of Pure Reason*, is deconstructed by means of a sequence of dilemma. And the universal existential illusion, in Madhyamaka, is deconstructed by means of a sequence of tetralemma. As for the dissimilarity, it dwells in the long-term *purpose* of such deconstructions. Kant's purpose amounts to setting a secure yet modest (non-ontological) foundation for science and morals. By contrast, Madhyamaka's purpose is to relieve people from excessive fascination for all the superficial conventions which are useful to life, *including* (I venture to guess) science and ordinary morals.

But this comparative characterization in terms of "stances" is not sufficient either, if we want to do justice of the possible relations between the

two philosophical positions we are pondering. Criteria of comparison are not enough: we need methods of *interaction* between positions. To go further on, we will then consider a second subset of non-conventional views on the nature of philosophy. They will be derived directly from the two positions we are analyzing.

To begin with, in agreement with the core concept of Kant's transcendental approach, it is futile to try to grasp something like a philosophical doctrine "in itself." One can only know a doctrine through a constitutive relation that, in this precise case, is *hermeneutical*. As any hermeneutics, this one needs a starting point, a set of preconceptions to be confronted with the texts and arguments of the philosophical position which is at stake. What are the sources of the indispensable set of preconceptions? One reasonable possibility is that the preconceptions are derived from another (either a former one or a culturally separate) philosophical position. If this is granted, the very contents ascribed to a philosophical position cannot be completely independent of the other position taken as a starting point. There may arise a Kantian reading of Madhyamaka, as well as a Madhyamaka reading of Kantianism. And the two readings may inform each other in retrospect.

In summary, a typically Kantian construal of the relations between philosophical positions would involve: (a) a formal preconception borrowed from one position, and (b) a "constitution" of the other position by applying such a pre-given form to the raw material of a set of texts and associated modes of life.

Now, besides this Kantian approach, we can also determine what would be a Madhyamaka construal of the relations between two philosophical positions. This Madhyamaka conception would probably be similar in spirit to the Kantian one, yet more radical, more empathic, and more symmetrical at the same time. Instead of "constitution" of (a philosophical position) by means of the formal frame of presuppositions afforded by another position, Madhyamaka would consider *mutual co-definition* of the positions. In the same way as any event of the conventional domain (*saṃvṛiti*), Madhyamaka would consider that philosophical positions are empty of own-being, and submitted to dependent arising. Traditionally, of course, these positions were co-defined within the network of Indian–Buddhist positions. As the history of debates between the Indian and Tibetan Buddhist schools has shown, the variegated philosophical positions are endowed with a precise role in a large-scale intellectual play within which they are able to shape each other. But nothing prevents one from expanding this network in a broader cultural sphere, thus amplifying the opportunities of co-definition. One effect of this procedure would not only be to measure one position by means of the other's standard. It would be to *alter* the positions (hopefully with some positive consequences in terms of refinement). Repressed potentialities of each position could be actualized by its confrontation with the other.

For example, the similarities between Kant's philosophy and the Madhyamaka, which were pointed out under more conventional construals of philosophical positions, must be reinterpreted in this new context. Such similarities do not prove, of course, that the two positions are cultural varieties of the same principles.

But they strongly suggest that a dialectic of mutual redefinition between the two positions can be undertaken with reasonable hope of fruitfulness. After all, in order to produce an offspring, one must unite two individuals with compatible genotypes.

At the end of the day, we would not be left with the philosophical systems of assertions, aims, and values we started from, but with modified and enriched versions of those systems:

- Neo-Madhyamaka with a theory of the "conventional-superficial truth" comprehensive enough to encompass modern science.
- Neo-Kantianism with a method for *effectively* freeing us from the various types of metaphysical illusion.

This is an ambitious program of which we will only take a few introductory steps. Three points of comparison between Kantian philosophy and the Madhyamaka (which may also serve as points of mutual clarification and mutual transformation) will thus be developed in the course of this article:

1 Breaking up of the "subject" into several cognitive modalities.
2 Transcendental status of the broken up "subject."
3 Co-relativity of the cognitive modalities and of the corresponding objective domains.

## The manifold "subject"

Fragmentation of the subject of cognizance into a multiplicity of specialized instruments of cognition was repeatedly suggested by Kant, in at least two ways.

First, the purpose of a whole chapter of the *Critique of Pure Reason* (the chapter entitled *Paralogisms of Pure Reason*) is to criticize the idea of a substantial subject. Instead of a unified *Res Cogitans*, Kant then posits an *operator* of cognitive unification: the universal *I think*, under which all presentations are brought.[5]

Second, the subject of cognizance is subdivided by Kant into distinct "faculties." True, he often refers to "faculties of the soul." But this does not weaken the former criticism of *res cogitans*, since the unifying substantive term "soul" is not supposed to refer to any substantial entity whatsoever.

In Kant's system,[6] there are three basic faculties (or powers); three modes of subjective agency expressed by three verbs: the faculty of cognition (to know), the feeling of pleasure and displeasure (to please), and the faculty of desire (to desire). These three faculties are derived from three constituents of the faculty of cognition: understanding, judgment, and reason. Each faculty in turn corresponds to a given a priori organizing principle: law-likeness, teleology, and duty. Law-likeness sets the limits of the science of nature; teleology rules the realm of *aesthetics* (because beauty is defined as the *purpose* of objects *relative to* the

faculties of individual subjects); and duty shapes out the task of *ethics*. Finally, each one of the organizing principles constitutes a domain of *objects*. Kant insists on the fact that those domains are not pre-given but *co-defined* by the corresponding organizing principle. To emphasize this, he calls them the *products* of the organizing principles. They are, respectively, nature (understood as an ordered set of phenomena which is thereby constituted into an intersubjectively shared domain), arts, and morals.

Here is recapitulative Table 7.1, which will be compared to another table [below] of cognitive triplets typical of Sanskrit.

*Table 7.1*

| *Faculty* | *Organizing principle* | *Organized domain ("product")* |
|---|---|---|
| Cognition [To Know] | Law-likeness (Understanding) | Nature |
| Pleasure [To Please] | Teleology (Judgment) | Arts |
| Desire [To Desire] | Duty (Reason) | Morals |
| *Subjective agency* [Verb] | *Form provided in advance by subjective agency* (Constituent of the faculty of cognition) | *Domain of* (*constituted*) *objects* |

Notice once again that there is a perfectly reciprocal relation between each faculty and its so-called "product" (or domain of objects). Such products or domains are not intrinsically existent; they are posited as possible targets for anthropological modes of agency referred to as "faculties." Conversely, the faculties are not supposed to be intrinsically existent either. They are discovered as the result of a regressive process of reflection starting from each given domain of objects, and they are therefore *defined* as what is actively related to a certain class of objects. The nucleus of the reciprocal relation is *action*, expressed by a verb. We will come back to this with more details in the final section. In this section, the cryptic (yet easily disclosed) role of verbs and actions in Kant's scheme of faculties will be paralleled with the pivotal position of verbs in the Sanskrit vocabulary of the theory of knowledge.

Attention will now be focused on the faculty of cognition. Kant divides it into an inferior faculty of cognition, which includes sensibility and imagination, and a superior faculty of cognition, made of understanding, judgment, and reason. As previously pointed out, the constituents of the superior faculty of cognition are also the sources of the organizing powers of the three major faculties.

Sensibility is quite special, in so far as it gives rise to no active organizing power whatsoever but only to a capacity of being passively affected. It is subdivided into an inner sense, which is a capacity of self-affection, and external senses. The latter senses fall into five categories according to Kant.[7] They include

three senses of surface (vision, touch, and hearing) and two senses of "intimate absorption" (taste and smell). The senses of surface favor objectifying distance, whereas the senses of "intimate absorption" merely trigger satisfaction or dissatisfaction.

Of course, if there were a unifying "subject" underlying the various components of the faculty of cognition, Kant's argument against reification of the "subject" in the *Paralogisms of Pure Reason* would appear purely rhetorical. But, as we will now show with the example of sensibility, this is not the case.

To begin with, which entity could play the role of a federator of external senses? In Western medieval philosophy, this putative federator has been called "Sensorium Commune," after Aristotle.[8] Avicenna thought the "Sensorium Commune" was an additional faculty able to grasp the objects of the various senses. He even endowed it with the status of a "*principle* from which the sensory faculties emanate."[9] The organ of this hypothetical "Sensorium Commune" was often discussed in the thirtieth century, and it was located either in the heart or in the brain. But, according to Albert the Great, the "Sensorium Commune" is a capacity of the soul which possesses "potentially all the sensible (entities)." It is defined as a "form which is numerically *one* in each perceiving subject."[10] The "Sensorium Commune" here becomes a substantial knot, underpinned by a substantial subject, of the variegated sensory threads.

Which faculty could play the same role in the system of Kant's philosophy? Prima facie, there are two candidates for this role: *understanding* and the *inner sense*. Nevertheless, none of them can be assimilated to a metaphysically unique principle of the special senses, as the medieval tradition would require.

Understanding, to begin with, is the "power to combine *a priori* and to bring the manifold of given intuitions under the unity of apperception (. . .)."[11] This power to combine applies to any kind of sensation and thus *looks like* "Sensorium Commune." There is a major difference, however, with the "Sensorium Commune." Understanding generates thoughts about sensations, not sensations of sensations. It is discursive rather than intuitive. It provides in advance phenomena with a categorial framework of unification, whose application to these phenomena is a condition of possibility of their being known as objects. But understanding does not enable one to grasp immediately the resulting unified pattern of phenomena by an intuitive act. It is conjectural rather than immediate or manifest. In other terms, the intellectual unity offered by understanding is comparable with the putative unity a hypothesis imposes to the consequences one may derive from it. This is clearly different from the unity provided by the "Sensorium Commune," that is comparable with the glaring unity a perception imposes to the parts of a perceived picture.

Another component of the Kantian faculty of cognition could play the role of a unifying principle: the Inner Sense. After all, in Western medieval scholastic after Avicenna, the "Sensorium Commune" is the first of the inner senses,[12] and this classification could have been taken over by Kant. However, the working of the Kantian inner sense is hardly compatible with such a role. Each sense is

related to a particular class of phenomena, and the inner sense does not depart from this rule. The inner sense is not the sense of the senses, but only the sense of introspective phenomena. Now, the latter phenomena may well reflect *nothing* of the affections of external senses (as it would be the case if the inner sense worked as a genuine "Sensorium Commune"), but rather pure *imagination*. Even worse, it is not always possible to distinguish imagination from sense data. Here again, with the inner sense as with understanding, there is no substantial assembler of the elements of knowledge, but only a *project* of assembling, which must be worked out again and again because it is permanently threatened by possibilities of mistakes and confusions. The only warrant of the relevance of this project is the intersubjectivity of the unified patterns of phenomena that arise from it. A dynamical and operational warrant replaces a static and foundational one.

Let me recapitulate three major characteristics of Kant's conception of subjectivity: (a) multiplicity of faculties, powers, or modes of subjective agency; (b) absence of any substantial bearer of these powers; (c) hypothetical unification of phenomena by the regulative activity of understanding. These features of Kant's philosophy are found in a much more radical form in Madhyamaka, as we shall now see.

Nāgārjuna's inventory of faculties includes six "forces" (*indriya*, sometimes taken to mean "powers of Indra"):

> Darśanaṃ śravaṇaṃ ghrāṇaṃ rasaṇaṃ sparśanaṃ manaḥ indriyāṇi ṣaḍ eteṣāṃ drastavyādīni gocaraḥ
>
> Seeing, hearing, smelling, tasting, touching, and mind are the six faculties. Their spheres consist of the object of seeing etc.[13]

The presence of mind in this indiscriminate list does not mean that the mind is one of the senses, but only that it has the same status (say the status of a mode of subjective agency) as they have.

The crucial question at this point is the following: is there a subject behind the modes of subjective agency? Many thinkers in India, especially the Buddhist personalists (Pudgalavādin) of the śāṃmitīya school,[14] were tempted to posit a subject-entity pre-existing to the six faculties:

> Darśanaśravaṇādini vedanādīni cāpy atha, bhavanti yasya prāg ebhyaḥ so'stīty eke vadanty uta.
>
> For whomsoever there exists seeing, hearing, etc., and feeling, etc., he exists prior to these. So do some declare.[15]

The latent argument of those substantialists was strikingly summarized by G. Bugault: "if there are properties, there must be a proprietor."[16] But this is a one-way inference from an empirical content to some intrinsic existence; exactly the type of biased reasoning Nāgārjuna criticized extensively in his work.

Concerning the inferred subject-entity, Nāgārjuna then raises the following challenge:

> Darśanaśravaṇādibhyo vedanādibhya eva ca yaḥ prāg vyavasthito bhāvaḥ kena prajñapyate'tha saḥ
>
> Whatever existent is determined as prior to seeing, hearing, etc., and also feeling etc., by what means is he made known?[17]

This remark can be understood along at least two lines of interpretation.

Some commentators[18] understand it as a statement of self-transcendence: how could a pure subject be an object of knowledge (for itself)? How could an eye be presented somewhere in its own visual field (Wittgenstein)? This interpretation (of which some aspects will be discussed more extensively in the following section) may be relevant to a certain extent. But if taken literally as stating the self-transcendence of a substantial subject, it can by no means express Nāgārjuna's thought. It tells us more about the basic conception of Nāgārjuna's opponents than about Nāgārjuna himself. According to the opponents, there *exists* a knower even if he/she is not known. By contrast, according to Nāgārjuna, any statement of inherent existence fails when submitted to the stringent tests of coherence and (lack of) empirical contents.

Other commentators[19] then interpret the quoted sentence as a declaration of skeptical empiricism. How could one know a proprietor apart from the properties, substance independent of its manifest determinations, being beyond *any* appearance? In a strictly empiricist framework, the question is bound to remain unanswered. However, Nāgārjuna's list of faculties seems to allow a theoretical (i.e. non-empiricist) answer to this question. True, one cannot know being beyond appearance by means of the senses, but one could perhaps know it by means of *mind*, through an inference. Inference is used successfully to go back to the phenomenal cause of a manifest phenomenon (the example of fire inferred from smoke is very usual in Dignāga's and Dharmakīrti's epistemology). Could not one extrapolate inference to disclose the non-phenomenal bearer of phenomenal features? This suggestion is typical of what Kant would criticize as an excessive ambition of reason. According to him, reason tends to be overconfident when it applies its methods even outside their field of validity. This manifests as soon as reason becomes caught into the insoluble conundrums called "antinomies." As for Nāgārjuna, he also shows that, if reason follows this way of extrapolation, it repeatedly contradicts itself.

In following the Kārikā, Nāgārjuna develops a classical aporia of identity, in order to prevent any attempt at inferring a proprietor behind the manifest properties, to wit a "prior entity" playing the role of a unified subject for the manifold faculties. He points out that, under the assumption of their intrinsic existence, the "prior entity" and its faculties are either intrinsically identical or intrinsically distinct. The option of their identity is skipped because it is both trivial and

irrelevant. Indeed, the proposition to be falsified is that a certain entity pre-exists to the faculties, and that it is *not* identical to them. The problem is that the alternative option, namely intrinsic distinction, is not acceptable either for a substantialist, if pushed to its ultimate consequences:

> Vināpi darśanādīni yadi cāsau vyavasthitaḥ amūny api bhaviṣyanti vinā tena na saṃśayaḥ.
>
> If he is determined as existing even without seeing etc., undoubtedly even these [i.e. seeing etc.] will exist without them.[20]

Distinction is a *symmetrical* relation. If the substrate is endowed with an independent existence (independent of the modalities it bears), then the modalities must also be endowed with an independent existence. But it was precisely this idea of an independent and separate existence of faculties that substantialists wanted to dispel by invoking a prior entity acting as their substrate, as their *subject* in the original grammatical sense.

The *reductio ad absurdum* has thus been completed. The view, according to which faculties exist in virtue of their being properties of a unique and distinct bearer, has been rejected. The seemingly opposite position (at least in a substantialist frame of thought) consists in claiming that each faculty has an independent existence, that there are as many subjective agents as faculties. This possibility is considered by Nāgārjuna, in Kārikā IX-9. But it is also rejected. Indeed, the autonomous existence of partial agents, their absolute difference offered as a remedy for the aporia of their absolute unity, would imply their being "windowless monads," namely isolated "selves" (*ātman*). There would be as many flows of experience as faculties, with no possible comparison between them. And this is not the case. The view of the independent existence of faculties is thus unacceptable.

To recapitulate, faculties can be endowed neither of independent existence nor of joint existence in a substrate (or "prior entity") bearing them. The conclusion of this twofold impossibility (and of some others as well) is the *leitmotiv* of Madhyamaka: "[. . .] thoughts of existence and non-existence are also renounced."[21] Neither inherent existence nor inherent inexistence of faculties; neither inherent existence nor inherent inexistence of a putative bearer. Only the co-relativity of each faculty and the corresponding act of apprehension.

What are we left with at this point? Are we left with isolated instantaneous impressions, that is, with a succession of momentary separated acts of perception? Things are not so simple. First, reification of those instantaneous particulars would be as much criticized by Nāgārjuna as any other reification. In this respect, Nāgārjuna differs markedly from the Sautrāntikas. Second, unification of a manifold presentation must be allowed, though in a definitely non-substantial way. How could this unification occur without a unifying substrate? Mind, as a faculty or as a power to act, provides the solution. Indeed, the function of mind is nothing else than unification under a percept or a concept. Articulation, comparison, unification of the various modalities of subjective agency is thus possible in

a Madhyamaka context. One must only be very careful to avoid, once again, reification. One must be careful not to replace the mental process of unification with a substantial unity. For this mental process itself consists in correlative and impermanent elementary acts, always put at risk by the possible revision of the (perceptive) acts they gather moment after moment. Therefore, the act of conceptual unification cannot be endowed with more "truth," let alone more "absoluteness," than the perceptive acts it unifies.

To sum up, Nāgārjuna's critical position towards the unity of the knower is virtually in one–one correspondence with Kant's: (a) plurality of faculties; (b) no substantial unifyer of faculties and no substantial faculties either; (c) possible synthesis of the sensory acts within mental acts which are both momentary and open to revision.

The parallel between Kant and Nāgārjuna on the issue of the fragmentation of the subject of cognizance having been completed, we must enquire on their residual differences and on possible points of debate, synergy, and mutual alteration. The aim is to implement, in this special case, the idea of dependent arising of philosophical positions. To begin with, what is the central difference between Kant's and Madhyamaka's deconstruction of subject? This difference can be stated in a few words. Whereas, in Kant's work, the (admittedly non-ontological) unity of the subject remains highly *valued*, in Madhyamaka, it is rather taken as a hindrance.

True, Kant insists that:

- A subject cannot be submitted to its own categories; in particular it cannot be submitted to the category of *substance*.[22]
- A subject is not presented as such ("in itself") in intuition. At most, it is thought of as a presupposition of any such presentation.

Point (a) precludes that a subject be a substance in the sense of critical philosophy (namely that it be posited as a permanent pole by the understanding, beyond the variable phenomena apprehended through sensory intuition). And point (b) states the mechanism of the metaphysical extrapolation by which a substantial subject is postulated. This mechanism consists in converting a presupposition into an entity.

However, besides these very strong anti-substantialist remarks, Kant brings in some correctives. After having explained at length that the act of synthesis is a condition of possibility of objective knowledge, and after having endowed it with a very high rank on his scale of priorities, he develops some compelling sequels of this act. Kant argues that positing a (subjective) unity behind the manifold perceptions is a spontaneous consequence of our uniting them into a single act of consciousness:

> Only because I can comprise the manifold of the presentations in one consciousness, do I call them one and all *my* presentations. For otherwise I would have a self as many-colored and varied as I have presentations that I am conscious of.[23]

Does this mean that unification within an act of consciousness *entails* unification under a single ego? Not really. Comprising the manifold of the presentations in one (act of) consciousness is definitely *not* tantamount to claiming that they all pertain to a single permanent ego. The first unification is a necessary, but not sufficient, condition for the second one. Yet, this additional unification is taken by Kant to be a natural extrapolation of the first one, and even perhaps a useful instrument for the synthesis of phenomena into objective bundles. Extrapolated unification under an ego is tolerated because it may promote, or may simply be a stubborn shadow of, the endeavor of objectification. The fact that, at the conclusion of such an extrapolation, one is bound to end up in *reification* of the unified entities and therefore in *transcendental illusion*, is considered by Kant as an unfortunate yet unavoidable consequence of the highly praised power of reason. This type of illusion, Kant writes, "(. . .) attaches to reason unpreventably and (. . .) even after we have uncovered this deception, still will not stop hoodwinking and thrusting reason incessantly into momentary aberrations that always need to be removed."[24] To sum up: using reason efficiently in the construction of (scientific) knowledge is considered so important by Kant that this must be done at any cost, including that of falling into certain illusory beliefs or perceptions that may be uncovered but not eliminated altogether.

By contrast, from a Madhyamaka standpoint, the game (of reason) is not worth the candle (of the existential illusion). The only good motive a Madhyamaka thinker may find to develop rational procedures is to free us from their spell. Thus, according to Dzong-ka-pa, using conceptuality and knowledge of conceptuality the right way may be a good method to defuse them and "reach the higher non-conceptual states."[25]

At this point one easily sees how the two philosophical positions can interact in a mutually productive way. Fine-tuned knowledge of the processes of reason, including when they are applied to the elaboration of modern science, may provide Madhyamaka with the proper lever for freeing contemporary human beings from their bondage. Conversely, embedding itself in the system of priorities, values and practices of Madhyamaka Buddhism may offer a Kantian epistemology the opportunity of avoiding *from the outset* (rather than merely uncovering *ex post facto*) transcendental illusions of all sorts.

## Transcendental subjectivity

The second aspect of our interactive parallel between Kant and Nāgārjuna concerns the *transcendental* status of the subjective domain and activity.

To start with, what does "transcendental" mean, and how can one find its characteristic mark outside Kant's philosophy? The word "transcendental" is very close to "transcendent" both in its etymology and in some of its uses. When it is used according to the standards of medieval scholastics, it means: "something which extends above and beyond experience," and also "something that can only be reached by the work of pure reason." But this acceptation, still common

nowadays in the Anglo-American philosophical tradition, was marginalized by Kant. Here is his definition:

(. . .) The word transcendental (. . .) does not signify something passing beyond all experience, but some thing that indeed precedes it *a priori*, but that is intended simply to make cognition or experience possible. If these conceptions overstep experience, their employment is termed transcendent, a word which must be distinguished from transcendental, the latter being limited to the immanent use, that is, to experience.[26]

In other terms, the transcendental subject is not located beyond experience; it logically precedes experience, it is a prerequisite of experience. By its very definition, the transcendental subject cannot become an object of knowledge (Western version); the knower is not to be known (Indian version); the precondition of knowledge cannot be one of its byproducts (logico-chronological version). But this mode of exposition, the vocabulary which is used in it, still bears the mark of ontology. Since the status of object does not suit the transcendental subject, one suspects that the grammatical paradigm of the object, namely the paradigm of the substantive term, does not suit it either. Kant's transcendental subject is nothing substantial. It is only a combination of (a) a formal framework and (b) an activity which consists in applying this formal framework to contents of experience. Even the word "subject" thus seems to be inappropriate in such circumstances. What is at stake here is the *form* of knowledge and its applications, independent of any hypothetical substrate of this form. This tendency towards more and more abstract conceptions of the transcendental function, towards less and less "subject" in it, was progressively realized in the course of post- and neo-Kantian reflections.[27] It could be fully accomplished through a productive contact with Madhyamaka.

Nāgārjuna indeed brackets the "subject" from the outset. This is especially clear in his *Vigrahavyāvartanī*, since, in the paragraphs of this text devoted to the problem of knowledge, he uses only two of the three relevant terms that may be derived from a verbal root, pushing aside the third term which could most easily be translated by "subject."

What are exactly these three terms and what is their most appropriate translation? They are: pramātṛ, pramāṇa, and prameya. Their usual translation is: knower, means of acquiring knowledge, and (object) to be known. However, their etymology should not be completely ignored. Pra-Mā means not only to have proper knowledge of, but primarily to *measure*, to mete out, to *form*, to *organize*. Accordingly, pramātṛ could be translated "the pro-former" (the one who proposes form), pramāṇa "the pro-forming frame" (or the presupposed form), and prameya "what is to be pro-formed." Little effort is needed to see in pramāṇa the Indian equivalent of Kant's a priori forms of sensible intuition and thought. Now, in the text we are referring to, Nāgārjuna only uses pramāṇa and prameya, not pramātṛ. The de-substantialization of the "subject" is so complete that it short-circuits part of the epistemological vocabulary. As we will now see, Nāgārjuna ascribes a transcendental position to the pramāṇa, not to the pramātṛ, or, more precisely, he

denies any non-transcendent position to the pramāṇa, not to the pramātṛ that he merely pushes aside.

The problem raised by Nāgārjuna,[28] as an introduction to this double negation is that of "establishing" (*pra-siddhi*) the pramāṇa. If the objects to be pro-formed (*prameya*) are "established" by the pro-forming frame (*pramāṇa*), how is this frame "established" in turn? This is tantamount to ask: if the objects to measure, to form (*meya*), are established by means of the measuring instruments (*māna*), how are the instruments themselves established?

Before we address directly this question (in the dialectical mode typical of Madhyamaka), we must clarify the meaning and connotations of the Sanskrit verb pra-Sidh we translated as "to establish." This verb is composed of the verbal root Sidh (weak form of Sādh), and the prefix pra- which denotes a forward motion. Sidh and Sādh (as well as the corresponding verbs with pra-) have meanings which can be classified in five subsets, from the concrete to the abstract. (1) To attain one's aim, have success, establish; (2) to produce, come into existence, originate; (3) to subdue, overpower, win; (4) to put to place in, set out, proceed; (5) to establish (a truth), substantiate, prove, demonstrate. In the domain of knowledge, the dominant group of meanings is the fifth. In the epistemological text we are analyzing, what is primarily at stake is establishment of truth by means of the four "means of acquiring knowledge" (*pramāṇa*): perception, inference, comparison, and verbal testimony. But if we are sensitive to etymology, we soon realize that the formal, ordering, connotations of the verbal root "Mā" almost automatically call for the corresponding connotations of "pra-Sidh." Instead of "establishing a truth by the means of acquiring knowledge," we could then translate: "ordering (or even *producing* or *constituting*) a domain of knowledge by means of a formal presupposition." The Kantian undertones of the latter sentence are not exceedingly artificial if we consider the semantic potentialities of the Sanskrit terms we are pondering on. The force of verbs such as "to order" or to "produce" will be supported at the end of this section, when it will become clear that the role of the means of acquiring knowledge does not reduce to disclosing passively a pre-given truth, but rather extends to the definition (or rather the co-definition) of this truth. Nāgārjuna's question thus becomes: if the objects to be pro-formed (*prameya*) are ordered or even produced by the pro-forming framework (*pramāṇa*), how is this framework ordered or produced in the first place?

Three solutions are successively proposed and rejected:

The first one[29] consists in saying that the pramāṇa are established, or produced, without the help of any pramāṇa. But in this case, the standard rule according to which any object of discourse is thereby object for some means of acquiring knowledge admits an exception and thus lacks universality. Certain objects would be presented to no "means of acquiring knowledge." Here, the object "means of acquiring knowledge" would be presented to no means of acquiring knowledge. The perfect symmetry of the couples pramāṇa/prameya, pro-forming frame/(object) to be pro-formed would be broken, in contradistinction with the systematic proposition of Nāgārjuna's opponent.

The second solution consists in claiming that every means of acquiring knowledge is established, ordered, produced, by another means of acquiring knowledge: perception would be established by inference, inference by comparison, etc. But "infinite regress"[30] would then ensue. However, the expression "infinite regress" is questionable, since what we have here is rather a *circle:* a is established by b, b by c, c by d, d by a. This expression is meant to translate the Sanskrit nominal compound anavasthā, derived from the verb Sthā (to stand), with the privative prefix an-, and the prefix of situation ava- (down, out). The term anavasthā thus means litterally: something which does not stand down, non-resting, unstable, holding no definite position: un-grounded, without foundation. The opponent's attempt at finding a ground, a foundation, for knowledge is thus challenged by Nāgārjuna.

The third solution, which we will develop more extensively, consists in stating that a means of acquiring knowledge is self-established, self-ordered, self-produced. This proposition will be discussed indirectly, through an allegoric expression. This allegory is developed by Nāgārjuna's opponent:

> dyotayati svātmānaṃ yathā hutāśastathā parātmānam svaparātmānāvevaṃ prasādhayanti pramāṇāni.
>
> Fire illuminates itself as well as other things. Likewise, the pramāṇas establish themselves as well as other things.[31]

Replying to this analogy, Nāgārjuna argues against the idea of self-illumination of fire in order to show something like the transcendental status of the means of acquiring knowledge. His major argument relies on considering a duality which is both impossible *and* indispensable for the discursive formulation of the process of lighting: the duality of light and darkness. Let's suppose, in agreement with the dialectical game of language, that:

> [. . .] prakāśo'ndhakāravadhaḥ.
> [. . .] illumination is destruction of darkness.[32]

This being granted, saying that fire "illuminates" itself looks unacceptable, since there is no darkness in it to be destroyed. Nāgārjuna's opponent then suggests that, in fire, darkness is "originally" (*utpādyamāna*) destroyed. But, Nāgārjuna replies, even if this were true, the light of fire would never have any occasion to enter into contact with this darkness which is allegedly destroyed by it. Therefore, fire could not illuminate itself in the previous sense.

The transformation of this argument against self-illumination of fire into an argument against self-knowledge remains implicit in Nāgājuna's text, because it is taken as straightforward. If such transformation had been performed, it would have started from another duality which is both impossible and necessary to any discursive formulation of the process of cognition: the duality of knowledge and ignorance, or the duality of form and formless. The conclusion of the subsequent

reasoning would have been that one can neither know what is a precondition of knowledge, nor impose a form onto what is itself a form.

Similar remarks can be found in Śāntideva: "Mind does not perceive mind," he writes, arguing that "a light source itself is not illuminated, because it is not conceiled by darkness."[33] Here, the use of the term "mind" should not be taken as acknowledging the existence of a "prior entity" behind the acts of perception: it is explicitly presented by Śāntideva as borrowed from the vocabulary of cittamā tra *opponents*.

This pattern of transcendental cognitive functions without substantial subject, typical of Madhyamaka, contrasts with the pattern of transcendental substantial subject, as it is held by Advaita Vedānta.[34] The allegory of fire is apparently the same in the latter context, but it generates very different conclusions. Here, what is transcendental, what holds the role of fire, is "immutable consciousness." True, this immutable consciousness cannot be known as an object would be, but according to Saṅkara,[35] it "self-imposes" in every circumstance. As a consequence, the pure conscious Self (*ātman*) is taken to be different, not only from phenomena, but also from the means of acquiring knowledge (*pramāṅa*): "(…) The Self (*ātman*), as the substrate of the development of these pramāṇas, is established prior to them."[36] Behind the pramāṅas, a substantial bearer is supposed. The reason for this supposition is likely to be that, according to Saṅkara, it is perfectly possible to have experience without anything experienced, as it is the case (he says) in deep sleep. Even "*nothing* to see" can be seen, he declares, and this proves the existence of an underlying perceiver beyond and above any perceived object.

To sum up, it is probably because Saṅkara did not accept the universal co-relativity of the act of perception and *something* perceived, that he posited a unique substantial subject behind the scene of the means of acquiring knowledge.

This shows us that co-relativity of the object and the act of cognition is a crucial criterion of demarcation between a dynamical–functional variety and a metaphysical variety of the thesis of a transcendental status of the knower. Saṅkara's variety is metaphysical because it flows out of a decision of granting the subject a certain autonomy. Kant's and Nāgārjuna's varieties are dynamical–functional because they arise from the idea of co-relativity of (a) subjective forms and (b) formed objective domains.

## The co-relativity of the subjective and objective sides of each act of cognition

At this point, we begin to sense that in Kant and Nāgārjuna, the co-relativity of the subjective and objective sides of an act of cognition (third point of our comparison) is both what accounts for the breaking up of the subject into specialized cognitive instruments (first point of the comparison), and what defuses the problem of self-knowledge (second point of the comparison) without postulating any background substrate. Let me develop this articulation on both

Kant's and Nāgārjuna's side, by emphasizing once again the mutual alterations these two philosophical positions may undergo by the very fact of their being compared.

As we saw in the first section, Kant's faculties remain separate, without any substantial unifying principle. The faculties are only submitted to an intellectual project, or rather an ideal, of general coordination. But the best way to understand this irreducible plurality of faculties is to relate it with their co-relativity to the various fields of knowledge they organize. Let us remind that a faculty (*Kraft*) is primarily a "power"; a power to act or to be passively affected. As any other capacity, or disposition, it is relational, in so far as it can only be actualized by means of an interaction with what it is able to receive or to organize. Kant however remains quite prudent when he gives details about what is made actual by cognitive relations. Cognitive relations do not actualize faculties "in themselves," of course. They only actualize the a priori formal framework by means of which each faculty organizes the field of experience. The co-relativity of the two terms of the act of cognition thus accounts for a cognitive plurality: one faculty for each type of act; one faculty for each domain of objects acted upon. But this cognitive plurality should not be mixed up with a plurality of knowing "things." It is only a plurality of constitutive *functional forms*.

Even this restricted construal of how faculties are actualized in relation with their domain of cognition looks surprising, however. For it seems to contradict the Kantian expression "*a priori*," which, taken literally means "*before* the relation which gives rise to experience." What are we to think of this apparent discrepancy?

Many interpreters of the past understood kantianism as a form of inneism, in the name of a literal reading of the "*a priori*." According to them, the a priori forms of sensibility and understanding are already there at the birth of the individual subject or even of the species. But Kant rejected explicitly this inneist interpretation. Already in the *Inaugural Dissertation of 1770*, he explained that the form of phenomena, which is imposed by the subject's spontaneity, does *not* preexist in this subject to any experience he may have.[37] Therefore, the form of phenomena is *not* innate. The problem is that this does not entail that, conversely, the form of phenomena is acquired passively from experience. Indeed, experience *presupposes* this form.

Neither inneism nor pure empiricism are therefore sufficient, according to Kant, to elucidate the origin of knowledge. None of the two dissymmetries, one in favor of an innate subjective faculty, the other one in favor of empirical data, can solve the problem of the source of the a priori forms.

The solution to this conundrum of the status of a priori forms appears almost obvious at this point, by mere contrast with the previous twofold bias. This solution is tantamount to accept a *symmetry*, a strict reciprocity, between the cognitive form and what is to be formed. Kant came closer and closer to this type of solution in the course of his work. In the *Inaugural Dissertation of 1770*, his view is the following: (a) the forms of sensibility are not innate; (b) the forms are not acquired by abstracting them from the *objects of the senses* (because sensation

can only provide the matter, not the form, of knowledge); (c) the forms are acquired by abstracting them from the very *actions* by which the mind orders the flux of sensations according to permanent laws.[38] Here "acquisition" means co-origination with the acts of perception. As soon as these forms have been acquired (or rather co-originated), perception gives rise to an organized "experience." Later on, in his reply to Eberhard of 1790, Kant expressed a similar idea in an even more striking way: The *a priori* forms, he writes, are "originally acquired."[39] According to him, the formal framework of nature is thus neither prior to experience nor abstracted directly from experience. It co-arises with experience.

The question as to how such a co-origination occurs during the cognitive prehistory is not addressed. This is not surprising, since the former question concerns what comes before the origin of cognition and is thus unanswerable in principle within cognition itself. According to Kant, there can be neither metaphysically absolute knowledge unveiling the "thing-in-itself," nor metaphysically absolute self-knowledge unveiling the "subject-in-itself." One is then left with an open-ended process of mutual mirroring, where the form of the faculty of cognition is *originally acquired* out of the acts performed on objects, and where, conversely, objects are *constituted* by the form of the faculty of cognition under the constraint of intersubjective validity.

Nāgārjuna's thought process is even more straightforward. According to him, the perceiver and what is to be perceived are the two sides of a single act of perception; the terms of this act are just as much the projection of a relation, as the relation is a connection between terms. Nāgārjuna's extreme fluency in a field that was conquered by Kant after a long and difficult struggle against the grip of western metaphysics, has many explanations. One of these is likely to be the very structure of the Sanskrit language. In Sanskrit, one generates triplets of substantives describing the protagonists of an act out of verbal roots which express the action itself. Along with this structure, it is just as true to say that the protagonists are the projection of the act, as that the act is a relation between protagonists.

Here, we are especially concerned by the acts of cognition and the corresponding triplets of terms. The most typical one, as we have already seen, is pramātṛ, pramāṇa, and prameya, deriving from the verbal root Mā. But many other triplets are available for the expression of the act of knowledge. Altogether, each one of these linguistic triplets are related exactly in the same way as Kant's triplets of Faculties, organizing principles, and organized domains (see the Section Introduction: comparing philosophical positions). They are also isomorphic to a characteristic Freudian triplet in which subject and object are the two sides of a single "economy" of pulsional desire, with no substantial identity whatsoever.[40] In the same way, as in the Sanskrit triplets, it is the verb (and thus the denoted action) that underlies the agent and the object acted upon, in the Freudian triplet, it is the power to act, the pulsion, that underlies the subject and object of desire. These structural similarities are so striking that one feels as if a sort of Indo-European common epistemological framework had been disclosed by a pluralistic comparison. This is all the more likely that, at a closer look, the epistemological

triplets seem to be a mirror image (or, may be, the hidden root) of the well-known Indo-European functional tripartition of society. To Dumézil's three anthropological functions (knightly, religious, and peasant), there corresponds the three cognitive functions (agent, form, domain). This correspondence does not sound too artificial since, after all, knights are the dominant agents, priests are the transmitters of norms (Dharma) that fix the form of society, and peasants are devoted to cultivating the domain of land. Moreover, to Dumézil's unity of social life as determined by this tripartition, there corresponds the unity of a flux of action as expressed by a verb together with the terms it unites in the proposition.

A summary of these remarks is given in Table 7.2 of cognitive functions (with two additional lines containing Freud's "economical" roles in pulsion, and Dumézil's functional tripartition).

*Table 7.2*

| *Subjective agent [Verbal Root]* | *Form provided in advance by subjective agency* | *Domain of (targeted and organized) objects* |
|---|---|---|
| pramātṛ [pro-former]<br>(Mā [to measure, to form]) | pramāṛa<br>[pro-forming frame] | prameya<br>[to be pro-formed] |
| bhoktṛ [enjoyer, experiencer]<br>(Bhuj [to enjoy]) | bhoga<br>[enjoyment] | bhogya<br>[to be enjoyed] |
| upādātṛ [appropriator]<br>(Dā [to give]) | upādāna<br>[appropriation] | upādeya<br>[to be taken] |
| upalabdhṛ [receiver, preceptor]<br>(Labh [to seize]) | upalabdhi<br>[obtainment, perception] | upalabhya<br>[to be obtained, to be perceived] |
| jñatṛ [knower]<br>(Jñā [to Know]) | jñāna<br>[knowledge]<br>*Etc.* | jñeya<br>[to be known] |
| *Subject* | *Freudian pulsion* | *Object* |
| Agentive role | Provider of determinative form (it is the pulsion that qualifies something as a proper objectal function) | Targeted role |
| *Knight* | *Priest* | *Peasant* |
| Primary agent | Provider of social form by means of norms (Dharma) | cultivator of the earthly domain |

The fascinating thing is that Nāgārjuna follows so faithfully the pluralist ternary pattern of Sanskrit that he rejects as incorrect or artificial any corrective to pluralism that this same language offers. No *ahānta* (reflexive consciousness, lit. I-ness) or *ātman* (Self) is accepted as a unique entity able to be (sequentially or simultaneously) a pro-former, an enjoyer, an appropriator, a receiver, and a

knower. No *ālambana* (bearer of determinations, object) is admitted as a unique entity to be (sequentially or simultaneously) pro-formed, enjoyed, taken, obtained, perceived, and known. True, the term ālambana is sometimes used by Nāgārjuna, but only as part of the discourse of his opponents.[41]

This feature of Madhyamaka can be appreciated in the theory of "faculties" (*indriya*). Once he has enumerated the six indriyas, sensory and mental, Nāgārjuna enumerates a series of terms corresponding to them. These terms are usually referred to as "spheres of objects,"[42] as if they were independent entities revealed by perception. But the expression Nāgārjuna uses evokes a perfect co-relativity of the "faculties" and their "objects," in such a way that they depend on one another for their definition and discriminate existence. These expressions involve, as ever, triplets or couples derived from a verbal root. The couple darśana/draṣṭavya (vision/visible or sight/to be seen) thus derives from the verbal root Dṛś (to see). From a morphological standpoint, the couple sight/to be seen is nothing apart and beyond the verb "to see." A critique of ontology in agreement with this linguistic background would then consist in denying that the faculty of vision and the visible thing are two inherently existent entities above and beyond the act of sight in its process. The current belief that the faculty of vision and the object of vision exist independently of one another, comes from the fact that the eye and the object of vision can arise as correlates of *other* acts of perception. For instance, they can arise as correlates of an act of being both touched (by another perceiver). Then, the eye and the object are not only terms of *one* relation of dependent arising; they are nodes in a very complex network of such relations. "Independent existence" appears as an unwarranted metaphysical translation of the open-ended multiplicity of the relations of mutual dependence. Nāgārjuna's conclusion develops as follows:

> Nāpaśyamānaṃ bhavati yadā kiṃcana darśanaṃ darśanaṃ paśyatīty evaṃ katham etat tu yujyate.
>
> When no form of seeing that is not perceiving exists, how could it make sense to say that seeing perceives?[43]

Any attempt at separating the substantive "vision" and the putative substance "faculty of seeing," respectively from the verb "to see" and from the ongoing act of seeing, are both declared to be in vain. Faculties and objects are nothing more and nothing else than mutual correlates in the process of a cognitive act, in the same way as "seeing" and "to be seen" are only correlative terms derived from the verb "to see." One is not referring to a couple of inherently existing entities facing each other, but only to a single process described, as a result of an urge to lexical discrimination, by means of a couple of substantives derived from a verbal root. No wonder that there must be as many "faculties" and correlative "objects" as types of cognitive *processes*.

The idea that the knower and what is to be known are strictly co-relative is then used by Nāgārjuna (in the *Vigrahavyāvartanī*) to solve the difficult question of self-knowledge raised in the previous section. As soon as he has invalidated

both the concept of a self-illuminating fire and its epistemological analogon of a self-knowing knower, Nāgārjuna gives an additional reason for refusing self-establishment of the pramāṇas (pro-forming framework, means of acquiring knowledge). A self-forming, self-constituting, self-knowing framework would be so to speak closed on itself. It would remain "without reference"[44] (*anapekṣya*, derived from the verbal root īks, to see) to what is to be formed, to be constituted, to be known. In this case, the self-sufficient means of acquiring knowledge would be a means of acquiring knowledge about nothing. But since, in actual fact, they are means of acquiring knowledge about something, the pramāṇas owe retroactively part of their "establishment" or constitution to this something.

The idea of a mutual "establishment," or constitution, or shaping, is then progressively elaborated in the course of Kārikās XL through LI of *Vigrahavyāvartanī*. With many precautions and warnings against reifying this idea into a "view," it is progressively suggested that the means of acquiring knowledge are "established" by what is to be known, just as much as the other way around. This new conception, that of a complete reciprocity in the "establishment" of knower and known, of the pro-forming framework and what is to be pro-formed, indeed appears quite difficult to hold as long as one persists in reifying the two corresponding terms. Let us suppose that one ascribes an essence to "what establishes" (*sādhana*) as well as to "what is to be established" (*sādhya*). Saying that "what is to be established" establishes "what establishes" would then be impossible by definition:[45] how could "what is to be established" change its own essence for the essence of "what establishes?" Under essentialist preconceptions, there even arises a sort of vicious circle. If the means of acquiring knowledge are the foundation of the essence of what is to be known, and if what is to be known is the foundation of the essence of the means of acquiring knowledge, then neither has proper foundations.[46] The outcome of this sequence of arguments which starts from a refutation of self-establishment of pramāṇas, and then undermines the idea of mutual establishment of pramāṇa and prameya, is a variety of tetralemma (may be even a pentalemma):

> Naiva svataḥ prasiddhirna parasparataḥ parapramānairvā na bhavati na ca prameyairna cāpyakasmāt pramānāṃ.
>
> The pramāṇas are not established by themselves or by one another or by other pramāṇas. Nor are they established by the prameyas or without "why?"[47]

In other terms, as long as one sticks to an essentialist-ontological prejudice, no mode of establishment of the means of acquiring knowledge is acceptable. As a consequence, one must realize this: neither the pramāṇas nor the prameyas (neither the means of acquiring knowledge nor what is to be known), can be treated as *essences* but only as *functions*.

Nāgārjuna writes this as clearly as possible by using a fresh illustration: the relation between father and son. The disturbing aspect of this illustration is that the relation between father and son can be read at two different levels, essentialist

and functional. At first glance, Nāgārjuna's terminology inclines to an essentialist interpretation. But one soon discovers that this interpretation is wrong.

Kārikā XLIX of *Vigrahavyāvartanī* initially refers to the *production* of a son by a father. The verb "to produce" (ut-Pad, literally "to step out"), used in this sentence, has very concrete connotations. It occurs whenever generation and birth are concerned. With this meaning in mind, one feels almost forced to infer that the former relation is one way: the father (seen as a procreator) can "produce" (can *generate*) the son, but not the other way around. Being a father is part of his (biological) *essence*, in the same way as it is *essential* to the son to be son of this father. However, a closer look shows that the use of the verb ut-Pad is utterly incompatible with this interpretation. For, between father and son the relation invoked by Nāgārjuna is not asymmetrical but completely symmetric:

> Pitrā yadyupādyaḥ putro yadi tena caiva putreṇa utpādyaḥ sa yadi pitā vada tatrotpādayati kaḥ kam.
>
> If the son is to be produced by the father, and if that father is to be produced by this very son, tell me which of these produces which other.[48]

What is at stake here is the power of the interconnection to endow a man with the *position* of a father and another man with the *position* of a son. These positions do not arise spontaneously from the essence of those who occupy them, but only as a byproduct of their very difference (as in F. Saussure's Structuralism). As a consequence

> Pitā cen na vinā putrāt kutaḥ putrasya saṃbhavaḥ putrābhāve pitā nāsti tathāsattvaṃ tayor dvayoḥ.[49]
>
> If there is no father without a son, how can there be a son? If there is no son, there is no father, so neither of them exist.[50]

Somebody is not inherently a father or inherently a son, but only in virtue of his relation with somebody else who plays the other *role*. The father and the son, *qua* complementary roles, are mutually determined. They are subject to dependent arising (*pratītyasamutpāda*), rather than intrinsically existent. From this remark, a host of consequences follows. If *roles* are concerned, not essences, then they can easily be inverted. In the same way as in a play of theater, an actor is supposed to be the father in virtue of his relation with the other actor who plays the son and conversely. This becomes even clearer if one abstracts the roles from the particular actors who embody them. The role "father" and the role "son" are completely interdependent.

Applying these reflections to the relation between pramāṇa and prameya, between pro-forming framework and what is to be formed, proves quite easy. Instead of essences, knower and to be known are considered as functions in the cognitive process. What then determines these functions is their position in a relational interplay. The pro-forming framework and what is to be formed are

mutually co-determined *qua* functions, and are susceptible of functional permutation:

> Evameva yānyetāni bhavataḥ pramāṇaprameyāṇi tatra katarāṇi pramāṇāni katarāṇi prameyāṇi ubhayānyapi hyetāni sādhakatvāt pramāṇāni sādhyatvāt prameyāṇi atra naḥ saṃdeho bhavati katarṇyatra pramāṇāni katarāṇi prameyāṇīti.
>
> In just the same manner, of these pramāṇas and prameyas of yours, which are the pramāṇas, and which others the prameyas? For both of these, as those which establish they are pramāṇas, and as those which are to be established they are prameyas. We have a doubt here as to which of these are the pramāṇas, and which others the prameyas.[51]

The role they play (the role of that which establish and the role of that which is to be established) gives rise to the pro-forming framework and to what is to be formed; it is by no means their doubtful essence which determines their role.

In view of these remarks, Nāgārjuna states repeatedly the co-relativity of the two sides of the process of cognition. In the *Mūlamadhyamakakārikā*

> Ajyate kenacit kaścit kiṃcit kenacid ajyate kutaḥ kiṃcid vinā kaścit kiṃcit kaṃcid vinā kutaḥ.
>
> Someone is made known by something. Something is made known by someone. How could there be someone without something and something without someone?[52]

And in the *Lokātītastava*

> Ajñayamānaṃna jñeyaṃvijñænaṃtad vinā na ca tasmāt svabhāvato na sto jñānajñeye tvam ūcivān.
>
> There is no (object) to be known unless it is being known. But discriminative knowledge does not exist without this (which is to be known). Therefore You have said that knowledge and the (object) to be known do not exist by own-being.[53]

This idea is also articulated very strongly by Dzong-kha-ba, who quotes the following sentences of Candrakīrti's *Prasannapāda*:

> Those are established through mutual dependence. When valid cognizers exist, then there are objects which are objects of comprehension; when objects which are objects of comprehension exist, then there are valid cognizers. However, the two, valid cognizers and objects of comprehension, are not established by way of [their own] entities.[54]

To sum up, Madhyamaka denies the own-being, or essence, of the framework of knowledge, and of what is to be known as well. By contrast, it states (i) a perfect

formal co-relativity of both terms, and (ii) an effective co-arising of both terms in the very *moment* of the *act* of cognition ("*ajñayamānaṃ*" in the sentence from *Lokātītastava* is a *present* participle).

Can we infer from what has just been said that Nāgārjuna was veering towards the assertion that "[...] the co-relativity and interdependence of subject and object?"[55] And in this case, are there real "[...] affinities to Kant and Schopenhauer ?"[56] These affinities, noticed by several authors, are often rejected subsequently as mere effects of a cultural distortion. J. Garfield thus casts doubt on the analogy between Madhyamaka's co-relativity and its Kantian or Post-Kantian equivalent because, he points out, Nāgārjuna did not accept "[...] the substantialist flavor of their analysis of the subject and object."[57] As for G. Bugault,[58] he begins with emphasizing the analogy between Kārikā IX, 5 of Nāgārjuna's *Mūlamadhyamakakārikā* and Kant's *Refutation of Idealism*. Indeed, in the latter text, Kant points towards a striking symmetry between the subjective and objective side of the act of cognition. On the one hand the objects of experience are *constituted* by way of application of the subjective rules of understanding; and on the other hand the subject is *revealed to itself* (in its temporal continuity) by means of its experience of "outer" objects.[59] But then, G. Bugault displays what he deems to be a major difference that undermines his tentative parallel between Kant and Madhyamaka on the co-relativity of subject and object. The problem he raises is that the "something" referred to by the Kārikā IX, 5 of *Mūlamadhyamakakārikā* is not tantamount to the "outer" object of Kant's *Refutation of Idealism*. The said "something" is more likely to be identified with a pure (and indiscriminately relational) *phenomenon*. Here again, the residue of metaphysics in Kant is contrasted with the extreme deconstruction of metaphysics in Madhyamaka.

These critical arguments against an analogy between Kant's and Nāgārjuna's conceptions of the cognitive co-relativity are essentially similar. But both of them rely on a quite conventional view of Kant's philosophy. Their Kantianism is at the same time foundationalist on the subjective side and quasi-substantialist on the objective side. The quasi-substantialist reading of Kant's construal of objects imposes itself onto J. Garfield and G. Bugault because they essentially rely on the most archaic *stratum* of Kant's concept of "thing in itself": the one which is found in the *Transcendental Aesthetic* of the *Critique of Pure Reason*. But if one pays attention to another facet of Kant, more and more perceptible in the sequence of the three *Critiques*, and then completely freed from its dogmatic remnants by generations of neo-Kantian thinkers, everything changes. Substantialism progressively disappears from the Kantian philosophical lineage, and one is left with a form of thought which is characterized by the following anti-substantialist features:

- functionalism (as in E. Cassirer's *Substance and Function*);
- dynamical conception of cognition (due to the role of constitutive a*ctivities* in pragmatist versions of Kantianism, such as J. Hintikka's);
- relativization (as in the young H. Reichenbach and R. Carnap, under the pressure of the scientific revolutions of the twentieth century);

- symmetry (because each one of the subjective and objective terms of the cognitive relations is construed as a unified "focus imaginarius" on each side of the experiential act).

E. Cassirer thus pointed out, referring to P. Natorp, that

> There is no fixed domain, or rigid sphere of subjectivity opposed to a strict and immutable sphere of objectivity. Instead of this separation between two closed worlds, one should make use of a purely *methodological* distinction between the *function* of "subjectivation" and the *function* of "objectivation."[60]

At this point, the affinities between Kant's philosophical descent and the Madhyamaka epistemology become obvious and devoid of any artificial feature.

## Conclusion: cognition and emptiness

These affinities go well beyond mere "family resemblance." They define real opportunities for generative cooperations. My conclusion will therefore emphasize two of these cooperations.

One of them has been exploited in the previous sections. It consists in using one of the two epistemologies in order to reveal latent tendencies of the other one. For instance, it becomes almost easy to see the connection between the transcendental status of subjectivity (see section The manifold "subject") and the idea of a complete relational reciprocity between the knower and what is to be known (see section Transcendental subjectivity), from a comparison between these two culturally remote philosophical conceptions. This point is often overlooked in commentaries of Kant's philosophy, whereas a comparative study of Madhyamaka makes it compelling.

Another crucial synergy concerns the problem of the descriptive status of the so-called cognitive relation. It is quite easy to describe a relation when one is looking at it from outside. But what about the case where one is deeply immersed into it; where one is a pole of this cognitive relation; or even where one is nothing else and nothing above the relational process itself? How can one describe knowledge from the midst of the flux of knowing? How can one depict the world from within the world? How can one speak of what happens from the innermost of its occurrence? Kant uses two complementary procedures in order to perform this difficult task. On the one hand he adumbrates an "outer" view of the cognitive relation by means of the quasi-metaphysical picture of a "thing in itself" affecting the mind of a subject. On the other hand, however, Kant prohibits inquiry about any one of the two terms of the relation. His reason for such a prohibition is that, according to him, the noumenal thing-in-itself and the mind (which might as well be somehow identical)[61] are both prerequisites for the process of cognition, and they cannot therefore be objects of cognition. Kant then focuses his attention on ambivalent and double-faced structures: the forms of intuition

and thought which, despite their being "subjective" or "ideal," are nevertheless conditions of the possibility of *objective* judgments. Kant thereby retreats from the pictural representation of the cognitive relation with its two terms, to the very productive center of this relation, or to the interface between its two hypothetical terms. So much so that it becomes almost ill-placed to speak of a "relation" in the ordinary sense of the term. Nāgārjuna operates in a similar way, with two differences, however. To begin with, he only ascribes belief in a metaphysical picture of cognitive relations *to his opponents*. He delegates to his opponents the task of expounding a duality between knower and what is to be known. He then shows that it is impossible to account for a cognitive relation as long as its two terms are taken to be inherently existent. Then, from this failure of the dualist picture, he posits a special mode of relation in which *relata* are nothing independent of the circumstances and the instant of its occurrence (this is dependent arising, or pratītyasamutpāda). But the true specificity of Nāgārjuna, with respect to Kant and to any theory of knowledge, comes next. Nāgārjuna insists on "what it is like to be" fully committed to this relation; on what one feels like when one *is* an active term of this relation; and on the "embodied ethics" that is a natural correlate of this full commitment. Now, *what it is like to be* a term of a cognitive relation in the process of completion is precisely "emptiness" (*śunyatā*). Emptiness is usually described as the heart of contemplative experience, but it can also arise as the brief instant of disorientation following a truly new experience, where no dualist picture or conceptualization has had enough time to (re-)crystallize. The interesting point, for our comparison, is that "emptiness" expresses another ambivalent and double-faced "something," holding an interfacial position similar to Kant's a priori forms. But unlike Kant's, this double-faced "something" is not a definite cognitive structure. It is a state of openness,[62] an exquisite variety of Shakespearian "readiness," which encompasses all the *possible* cognitive, emotive and empathic structures. At the very minimum, emptiness appears as the precondition of every Kant-like "conditions of possibility" of knowledge. At its maximum, it represents the ultimate locus of disillusion (as against Kant's pessimism about the perennity of our misperceptions), the direct experience of non-duality, and the correlative source of unbounded (and therefore uneffortlessly altruistic) action.

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14 The members of this school are supposed to be Nāgārjuna's opponents, especially in *Mūlamadhyamakakārikā* XI. See G. Bugault, in: Nāgārjuna, *Stances du milieu par excellence*, Paris: Gallimard, 2003, p. 129. G. Bugault here refers to Candrakīrti, *Prasannapadā Madhyamakavṛitti*, 192, 8.

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35 Ibid., p. 60.
36 M. Hulin, *Shaṅkara*, p. 72. et la non-dualité, Paris: Editions Bayard, 2001. This priority of the subject with respect to its domain of objects, claimed repeatedly, is the mark of transcendental philosophy as defined by Kant.
37 I. Kant, "On the Form and Principles of the Sensible and the Intelligible World (Inaugural dissertation, 1770)" in: I. Kant, *Theoretical Philosophy, 1755–1770*, Cambridge: Cambridge University Press, 1992, §8 and §15, AKII, p. 395 and 406.
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41 D. Kalupahana, *Mūlamadhyamakakārikā of Nāgārjuna*, I, 2, p. 106.
42 Ibid., p. 132.
43 Ibid., III, 4, p. 132. The translation was slightly altered (some expressions are borrowed from J. Garfield, *The Fundamental Wisdom of the Middle Way*, p. 139).
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45 Ibid., XLV, p. 121.
46 Ibid., XLVI–XLVIII, p. 122.
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48 Ibid., XLIX, p. 123.
49 Śāntideva, *Bodhicaryāvatāra*, IX, 113. Quoted by K. Bhattacharya in: Nāgārjuna, *Vigrahavyāvartanī*, p. 123.
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51 Nāgārjuna, *Vigrahavyāvartanī*, L (self-commentary), p. 123. The translation has been slightly altered.
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53 Nāgārjuna, *Lokātītastava*, 10, in: C. Lindtner, *Nagarjuniana*, Motilal Banarsidass, 1987, p. 133. The English translation has been altered to express the grammatical corelativity of Sanskrit terms derived from the verbal root Jñæ. For vijñana the choice is especially delicate. C. Lindtner renders it by "consciousness," which is usually appropriate in a Buddhist context. But here, in this context of cognitive process, I preferred "discriminative knowledge," which is close to etymology of the word and which once again displays the verb "to know," as in Sanskrit.
54 E. Napper, *Dependent Arising and Emptiness*, p. 109.
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# 8

# THE BODHISATTVA'S BRAIN

## Neuroscience and happiness

*Owen Flanagan Jr*

> Now, we are made to seek happiness. And it is clear that feelings of love, affection, closeness, and compassion bring happiness.
>
> (The Dalai Lama and Howard Cutler 1998, p. 52)

> For our life to be of value, I think we must develop basic good human qualities – warmth, kindness, compassion. Then our life becomes meaningful and more peaceful – happier.
>
> (The Dalai Lama and Howard Cutler 1998, p. 64)

### "Buddhists lead scientists to 'seat of happiness' "

The latter is my favorite extravagant headline from among numerous hyperbolic ones that appeared in the third week of May 2003. To my chagrin the source was an article I published that week in *The New Scientist* magazine that reported on two preliminary studies on one meditating monk! (Flanagan 2003b). I described these preliminary results as "tantalizing" and I said that we were positioned to test "the hypothesis" that long-term Buddhist practice might produce happiness. This is very different of course from saying that studies on Buddhist practitioners had, in fact, led scientists to the Holy Grail of the "seat of happiness!"

The "hypothesis" that there is a connection between Buddhism and happiness is now out-there and research designed to test the hypothesis is advancing. So eighteen months after my initial article appeared I take a deep breath, and ask is *dharma* the path to "true happiness"? The question is interesting because Buddhism is first and foremost a philosophy that promises awakening and enlightenment. Is it possible that awakening brings happiness in its trail? If so, what kind of happiness?

### Buddhism, happiness, and contemporary mind science

Familiarly, (1) happiness means different things to different people; (2) not all kinds of happiness are judged to be good or worthy; and (3) not all methods of

achieving happiness, even of the multifarious worthy sorts, are thought to be effective.

When a worthy sort of happiness is claimed to be among the goods produced by embodying a practice, two requirements must be met by scientists wishing to study the connection between that practice and that kind of happiness. First, we must specify precisely what *kind* of happiness we are looking for. Second, we must have a clear conception of what aspects of the practice are thought to be key to attaining *that* kind of happiness.

One problem in trying to explore the connection between Buddhism and happiness is that there is a large variety of Buddhisms. Thus it will be helpful for present purposes if I can extract an "ideal type," a common core conception, from what is, in fact, a multifaceted tradition.

I call this conception happiness$^{buddha}$ and claim that it provides such a plausible analysis of happiness, Buddhist style. The meaning of happiness$^{buddha}$ will receive elaboration as we proceed.

Happiness$^{buddha}$ involves two aspects:

1 A stable sense of serenity and contentment (*not* the sort of happy–happy/joy–joy/click-your-heels feeling state that is widely sought and promoted in the West as the best kind of happiness).
2 This serene and contented state is caused or constituted by enlightenment or wisdom *and* virtue or goodness[1] as these are characterized within Buddhist philosophy.

Until recently, claims that Buddhist practice produces happiness$^{buddha}$ were based on first-person phenomenological reports of practitioners and behavioral assessments of third-parties – either fellow practitioners or non-practitioners.

In the past few years, psychologists and neuroscientists aligned with "affective neuroscience" and "positive psychology," as well as psychiatrists and therapists of various stripes, economists, and evolutionary psychologists have begun to examine the social and psychological bases of positive affect, positive mood, non-destructive emotions, and their connection to happiness. This pure and applied scientific work is motivated in large measure by a commitment to improving the quality of human lives by empirically confirming which ways-of-being and living yield genuine meaning and "authentic happiness" (Seligman 2002). Some of this research, but certainly not all, seeks to examine the connection between Buddhism and happiness, or more usually, between certain Buddhist practices and positive affect, mood, and judgments of subjective well-being.

Regarding the current state of research, there are in fact *no* scientific studies yet on Buddhism as a lived philosophy and spiritual tradition, in any of its forms, and happiness. None, zero![2] What we do have are a few scientific studies that involve examining meditators – mostly experienced Tibetan Mahayana practitioners from France, America, and northern India (Lutz *et al*. 2004), or

individuals new to the practice of Zen and mindfulness meditation (Davidson *et al*. 2003; Kabat-Zinn 1995; Rosenkrantz *et al*. 2003).

Assuming that we will eventually succeed at measuring the effects of different types of Buddhist practice on happiness, we need to be clear about what sort of happiness, if any, the practice aims at or promises. This requirement is a general one for doing good science in this area.

In studies specifically designed to examine the connection between Buddhism and happiness, certain guidelines will lead to well-designed experiments that will yield revealing findings, one way or the other. For example, in cases where experienced practitioners are studied, we will want to know which kind of Buddhism they are committed to and what type of happiness, if any, that kind promises. I claim that happiness$^{buddha}$ as depicted earlier captures a common core conception shared across all or most forms of Buddhism. However, there are various more nuanced types or subtypes to be depicted and studied if one wishes to examine a specific Buddhist sect.

## The Buddhist *telos*

Buddhism is a distinctive normative theory, spiritual practice, and/or practical philosophy that promises nirvāṇa – release from unwholesome attachment and suffering – as the *ultimate end*. Here I make a principled but potentially controversial interpretive recommendation. Understand the claim that nirvāṇa is the *ultimate end* to mean that enlightenment/wisdom *and* virtue/goodness that provides release from unwholesome attachment and suffering is the *ultimate end* (Conze 1951/2003).[3] The rationale for this recommendation is that the second formulation, unlike the first, provides scientists who want to study the connection between Buddhism and happiness something tractable to work with. Nirvāṇa is subject to much more interpretive complexity and controversy across the different traditions of Buddhism than the concepts of enlightenment/wisdom and virtue/goodness. My interpretation of the *ultimate end* claim enables scientists to avoid getting tangled up in interpretive metaphysical complexities best left to experts in Buddhist studies. Furthermore, the interpretation according to which enlightenment/wisdom *and* virtue/goodness is the *ultimate end* is thought by many contemporary (but not all) Buddhists to state the *ultimate end claim* in a plausible and accessible manner.

Thus, Buddhism as I understand it here claims that enlightenment/wisdom *and* virtue/goodness is the *ultimate end*. Wisdom and virtue co-penetrate and co-constitute each other. You can't have one without the other. Following the *dharma* path so conceived will lead to overcoming the natural poisons or common human afflictions that lead to suffering, dis-ease, and unsatisfactoriness.

Does Buddhism also promise happiness? Among the kinds of Buddhism practiced by or, what is different, most familiar to contemporary Westerners, the best answer is "yes." But the situation is complicated. One confound is due to the

psychosocial fact that Westerners are unlikely to be attracted to any spiritual practice that didn't promise happiness. Thus, it is very appealing to "the Western ear," whether he who wears the ear is already attracted to Buddhism or not, that the current Dalai Lama says, as he does repeatedly, that "the very purpose of our life is to seek happiness."

This claim by His Holiness could be understood as claiming that happiness is the *ultimate end*. Indeed, such an interpretation would be very appealing in the West. But it would be a misinterpretation. The *dharma* path involves what I'll call a "basket of goods" which contains all the goods that Buddhism endorses, all the ends, aims, or goals that are deemed as worthy by Buddhism. Happiness$^{buddha}$ is (arguably) among these ends, but not the ultimate end. Enlightenment/wisdom and virtue/good is.

That said, Buddhism acknowledges that humans are all over themselves trying to achieve happiness. If there is some core universal motive that humans are possessed of, and driven by, it is the motive to attain happiness. The trouble is that typically we seek types of happiness that once attained are transitory and thus unsatisfactory, or we try to attain wholesome types of happiness in all the wrong ways. Śāntideva, the eighth century Indian Buddhist sage, writes:

> Although we wish to cast off grief,
> We hasten after misery;
> And although we long for happiness,
> Out of ignorance we crush our joy,
> As if it were our enemy.[4]

The trick is to direct our natural urge to happiness to the right sort of happiness and then to work with reliable methods to achieve it. The right sort of happiness is happiness$^{buddha}$. It comes, if it does come, from practices that aim at enlightenment/wisdom and virtue/goodness (see Bhikkhu Bodhi 2000 SN.4.223–229; SN 4.235–237). It is only by living a life of wisdom and virtue/goodness that a sense of meaning, purpose, and happiness can be secured. It is a Zen-like paradox that if we seek simply to attain happiness we won't, whereas if we aim for enlightenment and virtue, initially setting our undisciplined pursuit of happiness to the side, that we might begin to achieve "true happiness" – happiness$^{buddha}$.

It is a core feature of the human psyche, across all environments, that each individual is designed to seek happiness of a kind, or kinds, he-know-not-what. "Happiness," taken as the name for the multiplicity of states that fall under the folk psychological concept, might thus be said to be the sole universal aim. But happiness so conceived is not happiness$^{buddha}$.

According to the interpretation on offer, Buddhism claims that enlightenment/wisdom and virtue/goodness alone constitute the *ultimate end*. No kind of happiness, not even happiness$^{buddha}$ is the *ultimate end*. However, happiness$^{buddha}$ is a good and a worthy mental state. Furthermore, achieving the *ultimate end* reliably brings "a lasting state of happiness and fulfillment" – true happiness, happiness$^{buddha}$.

True authentic happiness is a great good (but not the *ultimate telos*) and it comes, if it does comes, from diligent practice that yields gradual enlightenment and virtue in the first instance. One does not become happy and then enlightened and virtuous. One becomes enlightened and virtuous and this produces true happiness, happiness$^{\text{buddha}}$. Thus, Alan Wallace writes, "*Dharma* refers to the understanding and behavior that lead to the elimination of suffering and its source and to the experience of a lasting state of happiness and fulfillment." This is happiness$^{\text{buddha}}$.

It should be clear enough that happiness$^{\text{buddha}}$ is not happiness as colloquially understood. One problem with common sense folk psychology is that it permits attributing happiness to unenlightened and non-virtuous adults. Indeed, folk psychology allows that such people might not just feel or think they are happy but that they might actually *be* happy. But such people cannot be happy$^{\text{buddha}}$. The latter is not a semantic stipulation in which case it would be uninteresting and simply beg the interesting question. It is a claim based on 2,500 years of the development of Buddhist philosophical psychology. The wisdom of the tradition as understood and interpreted by experts and as "tested" by practitioners engaged in self-scrutiny of their way of life not only confirms a certain picture of what true happiness is (it is some form of happiness$^{\text{buddha}}$), but also what ways of thinking, feeling, and living lead to happiness of this kind.

Imagine that we find ourselves in this situation: The world's richest and not-very-virtuous person's brain lights up "happily" in the same way as an enlightened and virtuous Buddhist practitioner. In both cases happiness sector *ø* lights up to degree ß. Should we say they are both very happy, and, furthermore, that they are happy in exactly the same way? This would be odd if we have as we do, good reason to think in advance that they experience qualitatively different kinds of happiness with very different causes and constituents. We might want to say that the evidence suggests that they both experience the same level of happiness as understood quantitatively, they both *feel* "happy 10" on a scale from 1 to 10, and the part of the brain that reveals the raw feel of happiness lights up in both brains. But this would be compatible with saying, as I think we ought to, that we do not yet see or detect whatever deeper brain activity subserves the different cognitive and conative aspects of their distinctive experience of happiness.

The general point is that only if we perform experiments armed with well-defined conceptions of the kind(s) of happiness we are looking for and trying to detect will we be in a position to judge whether our scientific techniques are sensitive enough to detect these states and to distinguish them from *simulacra*.

## Analyzing happiness

Happiness$^{\text{buddha}}$ is the kind of happiness that comes from commitment to and embodiment of Buddhist philosophy understood as a normative theory and practical philosophy of enlightenment or awakening and virtue or goodness. It is a type of happiness born of achieving wisdom (*prajñā*) by becoming free of the standard

mental affliction that comes with being human, and finding one's way to deep compassion (*karuṇā*) and loving-kindness (*maitrī*) for all sentient beings. Although I have claimed that enlightenment and virtue co-constitute the *ultimate end*, we can analytically separate the two components:

> *Enlightenment/Wisdom*: Buddhist enlightenment requires that one comes to understand: (1) that all things are impermanent (Sanskrit: *anitya*; Pali: *anicca*); and (2) for this reason I am not possessed of a permanent self, ego, or soul (S: *ātman*; P: *anattā*). "I" am *anātman* (P: *anattā*), a transient "being" constituted only by certain ever-changing relations of psychological continuity and connectedness.
>
> (MN.1.138; Siderits 2003)[5]

> *Virtue/Goodness*: Buddhist virtue/goodness requires moral conduct (*sīla*) and thus conformity to the third, fourth and fifth of the steps on the noble eightfold path. True virtue, of course, requires more than moral conduct. An individual, such as a bodhisattva, overcomes the three poisons of greed (*lobha* or *rāga*), hatred (*dosa*), and delusion (*moha*), and positions herself to embody the four divine illimitables – compassion, (*karuṇā*), loving-kindness (*maitrī*), empathic joy (*muditā*) and equanimity (*upeksa*).
>
> (Śāntideva, eighth century CE; Lopez 1988)

One reason to say that the latter characterization of wisdom and virtue involves an analytic distinction of two aspects of one phenomenon is because, as I have said, they are in fact co-dependent. The noble eightfold path reveals this. Although the noble eightfold path is commonly thought to provide instruction for moral conduct (*sīla*), only right speech, right action, and right livelihood (3, 4, and 5) pertain directly to *sīla*. Right effort, right mindfulness, and right concentration (6, 7, 8) pertain to mental disciple, *samādhi* (e.g. concentration meditation practices), and are designed to support both wisdom *and* goodness. And the first two steps on the path (1 and 2), right understanding and right thought, fall under wisdom (*prajñā*), for example, coming to see the truth in 1–2 above, *anitya* (impermanence) and *anātman* (not-self).

## The Bodhisattva's happiness

To understand more about happiness$^{buddha}$, we may consider how it is conceptualized by the Mayahana tradition in the form of the bodhisattva (Wallace 1993; Williams 1989). The bodhisattva ideal exemplifies forms of enlightenment and goodness that can be embodied, in principle, by any person through devotion to the relevant ideals and diligent practice. Gaining deep understanding of happiness$^{buddha}$ (so conceived) is absolutely essential for those scientists who seek to detect or measure it.

It is important to stress that the bodhisattva ideal on both classical and contemporary views is a developmental one. Achieving full enlightenment and the "marvelous qualities" of extraordinary virtue (Lopez 1988: 200) takes time, and thus how deep or complete the wisdom or virtue achieved by a particular bodhisattva is will admit of degree.

To keep things simple, as well as congenial to the sort of twenty-first century *socially engaged* (Queen 2000; Queen and King 1996; Thich Naht Hahn 1987, 2004), and *naturalistic* Buddhism (Flanagan 2002, forthcoming) that makes most sense to me, I conceive of the bodhisattva in a metaphysically minimalistic way. She is enlightened in so far as she understands impermanence (*anitya*) and the nature of herself as *anātman*. She conscientiously stays on the noble eightfold path, overcomes the common mental afflictions (egoism, avarice, hatred, and the like), eventually embodies the four divine abodes, the six perfections (incredible patience, great mental acuity, extremely subtle perceptual sensitivity to the needs of others, and so on). Armed with compassion, loving-kindness, sympathetic joy, and equanimity – she takes her battle – for happiness and against suffering into the world (Pema Chodron 2002, speaks fondly of the "warrior bodhisattva").[6] The bodhisattva is a courageous and virtuous moral activist. She lives an active life of virtue, having become sufficiently enlightened to understand that in doing so she attempts to realize her full humanity and to achieve whatever excellence lies within our human range.

The metaphysically minimalistic conception is to be contrasted with a metaphysically extravagant conception according to which the developmental progress through all 10 or 11 stages of bodhisattvahood takes "innumerable eons" and an indenumerable number of rebirths (Mark Twain once commented, "the problem with progress is that it takes so long")! The essential difference between the minimalistic and extravagant conceptions simply involve foregoing literal commitment to the doctrine of rebirth, character development that takes uncountable lives, as well as such powers as being able to fly in lotus position or to see "a number equal to the particles of ten million billion worlds" (Lopez 1988: 203).

The idea that there might be a one-lifetime track to enlightenment is thought to be a recent development, but the idea is available in the classical Pali Canon (e.g. the *Mahāsatisatipaṭṭhāna Sutta*). More frequent mention of the possibility of one life liberation is available in certain strands, especially in their Tibetan and medieval Pure Land forms. The naturalist will require that whatever excellences of wisdom or virtue are achieved or achievable by the bodhisattva can't take longer than this one-lifetime, because, well, that's all we have.

Next I want to claim that the bodhisattva, so conceived, can serve as a model for the kind of person all Buddhists can embrace either as a worthwhile state-of-being, or even, although this is not required, as the highest form of human life. That is, I use the bodhisattva as an ideal that – I hope – all Buddhists can perceive as noble and worthy.

Any serious Buddhist practitioner who is enlightened and is motivated by enlightenment and compassion to alleviate the suffering of all sentient beings,

and especially one who takes the vows to do so, is somewhere along the bodhisattva's path.[7]

## Some complexities and perplexities

The bodhisattva starts on the path to *perfecting* wisdom and virtue when she takes the familiar vows to achieve full enlightenment and liberate all sentient beings. Remember the bodhisattva ideal is developmental. So long as bodhisattva is somewhere along the path to full enlightenment or awakening (*bodhi*) she has attained some high degree of wisdom and virtue. And if, as I have argued, being in the process of *perfecting* virtuous enlightenment is sufficient for achieving happiness$^{\text{buddha}}$, then the bodhisattva is happy$^{\text{buddha}}$, at least to some significant degree.

One might have two legitimate questions: First, does attaining the *telos* of wisdom and virtue in the way the bodhisattva does simply cause her to be happy in some still-to-be specified way, or do the wisdom and virtue constitute the happiness so that she experiences her happiness as born of, related to, or made-up of wisdom and virtue? Second, is the kind of happiness$^{\text{buddha}}$ the same at every stage in the development of the bodhisattva's wisdom and virtue, or might we need to parse happiness$^{\text{buddha}}$ into, say, the ten sub-types depending on where the bodhisattva is along the path?

The correct answers are: (1) Happiness$^{\text{buddha}}$ is not only caused by achieving enlightenment and virtue, enlightenment and virtue constitute it. The bodhisattva experiences her happiness as formed by the tandem of enlightenment and virtue. (2) Yes, there almost certainly are sub-types of the general type happiness$^{\text{buddha}}$ whose subtle character depends on where the bodhisattva is on the path as well as on distinctive personality traits and life circumstances of particular individuals of personality and temperament found among saintly types.[8]

At this point we are able to state a defensible interpretation of happiness$^{\text{buddha}}$ that fill out the initial characterization:

> Happiness$^{\text{buddha}}$ is the name for a settled state of mind and heart caused by following the *dharma* path, overcoming the mental afflictions (egoism, avarice, hatred, and false view), abiding the noble eightfold path, eventually embodying the four divine abodes, and living an active life of virtue so conceived. Any person who reaches the bodhisattva stage has wisdom (*prajñā*) and virtue (*sīla*) of the sort that involves, among other things, the wisdom of knowing that all things are impermanent, including himself, and thus that he is psychologically continuous being (*anātman*) rather than an immutable self or ego (*ātman*).

## The Bodhisattva in Botswana

Suppose a bodhisattva works for "*Medecins Sans Frontieres*" ("Doctors Without Borders") with HIV and AIDS patients in a country like Botswana where the

epidemic is out of control. She is energetic and dedicated to her work and sees that she is doing good, but she sometimes misses her friends, her home (in his original autobiography, the Dalai Lama, 1962, in exile in India, expresses just such feelings, and is sometimes overwhelmed by the sorry state-of-things, the disease, poverty, promiscuity, indigence, widows, orphans, and so on). She doesn't fall apart but she does feel the pain of her charges. She speaks to her friends about feeling a bit low. Is this impossible? It is if she is a bodhisattva and the virtue of the bodhisattva necessarily brings about or is constitutive of happiness where whatever else "happiness" means, it means "not low." Yet it seems possible that such a person might exist. This virtuous person, we might want to say, is a bit down, at least she is not "extremely happy," "gleeful," or "joyful."

Bodhisattvas are often described as experiencing a kind of bliss (although it is noteworthy that the state of bliss is most commonly associated with entering the path). Must a bodhisattva always experience bliss? Can't a bodhisattva have non-blissful periods? Yes. Psychological realism, as well as canonical Mahayana texts, suggests that it is implausible to attribute ever-present bliss to the bodhisattva.[9] That said, through whatever "ups and downs" a particular bodhisattva might be imagined to experience, she will experience some form happiness$^{\text{buddha}}$ as I have defined or characterized it. We might say that for a bodhisattva who does not feel "happy" or "on-top-of the world" on certain days or over some extended period of time, as these terms are used colloquially, that she is nonetheless happy$^{\text{buddha}}$ deep-down-inside. Furthermore, bohdisattvas have tools, meditation, chanting, and so on, to moderate and to modify negative emotions so they do not become afflictive or destructive.

What I have just said is important for the conversation about Buddhism and happiness. On any given day a bodhisattva might not be "extremely happy," or "very happy," or even just plain "happy" according to ordinary language standards. She will however be happy$^{\text{buddha}}$. If some scientist is measuring her happiness using ordinary language standards she probably will not provide a first-person report that leads to the ascription of happiness, nor quite possibly will her brain light up in the normal "happy" or "very happy" way. Nonetheless, she will be happy$^{\text{buddha}}$. Any mind scientist who is interested in the connection between Buddhism and happiness better be looking for *that* state.

Buddhism as a normative theory deems it sensible to use "true happiness" to refer to "the way it is to be" a person who follows the noble eightfold path and embodies specifically the four divine abodes. Whether all such persons "feel happy," especially constantly so in the ordinary sense(s), is irrelevant. Importantly, however, happiness$^{\text{buddha}}$ is not just a feeling (which ordinary "happiness" is commonly treated as) but it is a state constituted by cognitive, conative (i.e. motivational), and felt aspects.

I take the interpretive stance that all contemporary Buddhisms do promote and promise "true happiness," interpreted as (some form of) happiness$^{\text{buddha}}$. Furthermore what is absorbed and maintained from classical Buddhism is the crucial idea that achieving "true happiness" – assuming it can be achieved – requires

overcoming various common mental afflictions and destructive emotions and that the search for happiness as popularly depicted and applauded then and now takes us on a fool's errand.

## The color of happiness

"The Colour of Happiness" was the title of the article I wrote for *The New Scientist* (Flanagan 2003b) that led to the media frenzy I reported in the opening paragraph (it seemed like a frenzy to me and my poor phone but was probably just a flurry as these things go). I was reporting on plans underway to study the minds and behaviors of what Paul Ekman of the University of California San Francisco Medical Center and one of the principal investigators calls "exemplary individuals." At the time I wrote the article the *only* completed brain study I discussed had what scientists call "an $n = 1$," which means exactly one experimental subject had his brain scanned by a fMRI! Needless to say, this is not ordinarily considered a good sample size. However, this first exemplary individual, Matthieu Ricard, was an experienced Buddhist monk (born and bred in France) and his left prefrontal cortex (the area just behind the forehead), an area well-established to be reliably correlated with positive emotion, lit up brightly (thus the editor's choice of "colour" in the title). Indeed, his left side lit up brightly and more leftward than any individual tested in previous studies (approximately 175 subjects). However, none of these prior studies involved people meditating while the scanning was underway (in the meditating monk's case most meditation was on compassion and loving-kindness). These scientific problems did not prevent various media sources from announcing that scientists had established that Buddhist meditation produces (a high degree of) happiness.

Luckily, prior to the study of the meditating monk that His Holiness, using his given name, Tenzin Gyatso, first alluded to in an op-ed piece for *The New York Times*, April 26, 2003 (Gyatso 2003a), that I reported on in *The New Scientist*, and that Dan Goleman (2003b) wrote about in *The New York Times* (February 4, 2003), there had been a number of excellent studies on positive affect and the brain (Davidson 2000; Davidson and Hugdahl 2002; Davidson and Irwin 1999; Davidson *et al.* 2002). These experiments revealed that when subjects are shown pleasant pictures (say, sunsets), scans (PET or fMRI), or skull measurements of activity (EEG), reveal increased left side activity in prefrontal cortex. Whereas when subjects see unpleasant pictures (say, a human cadaver), activity moves rightward. Furthermore, people who report themselves generally to be happy, upbeat, and the like, show more stable left side activity than individuals who report feeling sad or depressed in whom the right side of prefrontal cortex is more active.

Positive mood, we can say, has two faces. Subjectively, phenomenologically, or first-personally it reveals itself in a way that an individual feels and about which she typically can report on (although subjects commonly report difficulty describing exactly what the positive state is like). Objectively, the subjective feeling state

is reliably correlated with a high degree of leftward prefrontal activity. Thus we can say that *if* a subject is experiencing happiness or, what is possibly different, is in a good mood, then left pre-frontal cortex is or gets frisky, or bright, or even colorful depending on whether you use EEG, fMRI, or PET.

It needs to be said that the pre-frontal cortices are involved in more than emotion, affect, and mood. The pre-frontal lobes are relatively recently evolved structures (in ancestors of *Homo Sapiens*) and have long been known to play a major role in foresight, planning, and self-control. The confirmation of the fact that pre-frontal cortices are also crucially implicated in emotion, mood, and temperament is exciting because it lends some insight into *where* a well-functioning mind coordinates cognition, mood, and emotion. *How* exactly the coordination is accomplished is something about which little is known at this time.

In any case, Davidson found that in a normal population (of undergraduates) pre-frontal lobe activity is distributed in normal bell-shaped curve fashion. So 67 percent of the population shows mixed left and right activity with roughly 16 percent showing predominantly left or right activity. Assuming the undergraduate population is representative, then it looks as if one-third of ordinary Americans are "very happy," two-third feel mixed or average, "Ok," as we say, and one-third feel "on the low side."

I take it that any finding to the effect that Buddhist practitioners are happier than most would be a statistical finding that significantly more than 16 percent would be in the first group. A representative sample of Buddhist practitioners with 25–30 percent in the first group would be statistically astounding. A somewhat lower percentage would still be impressive. As I write the data simply do not exist.

With this research as background one might be inclined to ask: Was the meditating monk who was "off the charts" the "happiest" subject ever tested? Saying "yes" is tempting, and many of my interviewers assumed that this was part of the message, as if being "leftmost" is like "being the tallest." But it is premature to say any such thing. The brain is plastic, but more importantly for present purposes, individual brains "do the same thing" in somewhat different ways and at somewhat different locales. Suppose two people both think "that patch is red" in response to the exact same red patch stimulus. Assume that both are "having the exact same thought," although it must be said even this assumption is controversial. We might after all experience red a bit differently, perception of red things might cause different associations, and so on. Bracket these worries. Assume that whatever else goes on when each of these two individuals think "that is a red path," both think that much and each thinks the thought in the same way as far as that red patch goes. If so there will be brain activation in each individual that is *that* thought or is the neural correlate of *that* thought. But no one expects two different brains to have exactly the same thought in a way that is subserved by perfectly identical neural activation. The consensus is that the exact same thought can be realized (indeed is likely to be realized) in different brains in somewhat different ways. Why not the same for phenomenologically identical or very similar emotional states?

For all we currently know, the subject who tests twenty-fifth or thirty-fifth from the leftmost point so far plotted might be, according to all the evidence taken together – phenomenological, behavioral, hormonal, neurochemical – the happiest person ever tested. Left-side pre-frontal activity is a reliable measure of positive affect, but no one has asserted let alone confirmed that among "lefties," the further left you are the happier you are. In addition, the concepts of "positive mood" and "affect," even more so "happiness," are not fine-grained enough, nor sufficiently well operationalized by the scientists who use them, so that we know what specific kind of positive mood or emotional state is attached to a lit-up area (Seligman 2002, is exceptional in aiming first and foremost at sorting out the constituents and components of our ordinary conception of "happiness"; but Davidson and Ekman are also well aware of the need for such work). The important point is that for all anyone knows at this point, a happy life whose source is family might light up the brain in the same way as a happy life whose source is virtue or even money.

It will be helpful to explain a bit about the ideas then led to the current fruitful but conceptually complex studies on the connection between Buddhism and happiness. This will better position us to understand the relation between the sort of happiness Buddhist practice seeks to promote, namely happiness$^{buddha}$, and the kind of happiness science seeks to find neural correlates for in the brain. We need to know whether, and if, the neural activity associated with the sort of happiness scientists are looking for, and in some cases claiming to see revealed in the brains of Buddhist practitioners, is *that* kind of happiness.

## In search of "true happiness"

The idea for specific studies on "exemplary individuals," including the first monk studied, was hatched by Richard Davidson, Paul Ekman, Matthieu Ricard, and the late Francisco Varela[10] at a week-long meeting in March 2000 that these four, myself, and a handful of other scientists and philosophers participated in with His Holiness the XIV Dalai Lama in Dharamsala, India on the topic of "Destructive Emotions." The first study on Matthieu Ricard, the meditating monk, was carried out by Davidson, Ekman, and their colleagues one-year after our initial meeting.

The initial week-long meeting was designed to create a conversation in which wisdom from Buddhist and Western philosophy as well as recent scientific research on the emotions were brought together to puzzle, in a somewhat indirect way, over the perennial question: "*What makes for a truly happy, meaningful, and fulfilling human life*?" I say "indirect" because our strategy for grappling with this big question was to focus on the question's inverse: *What sorts of thinking and feeling reliably present obstacles to human flourishing*? The tactic was to identify obstacles to happiness, equanimity, and virtue with the thought that if these obstacles could be identified, moderated and even removed, then happiness, equanimity, and virtue would be, at the very least, more accessible, more easily attainable. The participants, partly inspired by previous work of His Holiness and Howard Cutler

(1998, 1999), agreed that destructive states of mind are abundant and difficult to overcome. Some destructive states of mind might be unwholesome and vicious in themselves, for example, avarice and hatred. Others, such as anger and even romantic and familial love (emotions that can feel very good), might become destructive or poisonous when they take a form or reach a degree that undermines their proper use and function or that destabilizes other wholesome states, for example, expansive compassion, loving-kindness and sympathy (Flanagan 2000). Daniel Goleman, the chief moderator and a lively thoughtful participant, has published a wonderful book on the meetings, *Destructive Emotions, How Can We Overcome Them?: A Scientific Dialogue With the Dalai Lama* (2003a).

## I left my amygdala in San Francisco

Buddhism claims, first and foremost, to offer a solution, so far as one is possible to the main existential problem faced by all humans: how to minimize suffering and maximize happiness. The Dalai Lama repeatedly says in recent writings that happiness is the sole universal aim of humans. Buddhism, like every other moral tradition, distinguishes between worthy pleasures and base ones, between things we ordinarily think bring happiness and things that really do bring happiness. Money doesn't bring happiness, at least not "true happiness" (although, it might help some), but wisdom *and* virtue does. Buddhism is, at a most fundamental level, a practical philosophy that claims that wisdom and virtue is its own reward. Wisdom and virtue constitute liberation, help to overcome unsatisfactoriness (*duḥka*), and to produce happiness$^{\text{buddha}}$.

In the *Art of Happiness* (1998) by the Dalai Lama and Howard Cutler, there is great attention to offering a detailed description of a person of virtue: she is selfless, compassionate, displays sympathy and empathy to a high degree, and she typically experiences calm and serenity. When fear and anxiety arise, she has techniques to bring herself back to the calm and serene zone. The constellation of these traits – *if* accompanied by commitment to the *dharma* path – brings about and/or constitutes happiness$^{\text{buddha}}$. The individual flourishes, and it is partly because of the way she flourishes that she feels some measure of peace and tranquility as well as self-respect and a modest pride.

In any case, before the meditating monk visited Richie Davidson's lab in Wisconsin, he spent several days with Paul Ekman in San Francisco. Ekman is the world's leading authority on the basic emotions (fear, anger, sadness, surprise, disgust, contempt, and happiness) and on the universal facial expressions that accompany them (Ekman 2003; Ekman *et al.* 2003; Flanagan 2003a). With his longtime colleague and collaborator, Robert Levenson, who works across San Francisco Bay at the University of California, Berkeley, the two set to work at studying the effects of long-term Buddhist practice on evolutionarily basic emotional responses and on individual differences in ability to read emotions off faces. One study focused on the startle response which is thought to be essentially a mental reflex (i.e. virtually automatic). The other was on face reading.

First the startle results. The amygdala, twin almond shaped organs, as well as adjacent structures in the forebrain beneath the cerebral cortex, are part of quick triggering machinery for fear, anxiety, and surprise. I see a fierce, snarling wolf and – without any forethought – head for the hills in fear. Lighting is striking in my vicinity – I am scared and anxious and seek lower ground. The amygdala and associated structures are key components of this affective response system. It is likely, but not yet confirmed, that areas in these very old brain structures (fish have amygdala-like structures) are involved in other evolutionarily basic emotions such as anger and, more controversially, in certain pleasant feelings associated with good meals or good sex. Although the amygdala lie beneath the cerebral cortex they require cortical processing for activation. I need to see the bear (visual cortex) or hear the thunder (auditory cortex) before I feel frightened.

Much of what we know about the amygdala is due to path-breaking work by Joseph LeDoux (1996) at New York University who instigated work throughout the world on these structures. We know, among other things, that a person, via her amygdala and thalamus, can be classically conditioned so that things that really aren't worth being scared of or anxious about can become fear or anxiety inducing. We also know that although the pre-frontal cortices and amygdala interact, what the amygdala "thinks" and "feels" is extraordinarily hard to override simply by conscious rational thought. Knowing that my fear of falling autumn leaves (suppose I received electrical shocks during my first autumn) is totally irrational is not remotely sufficient to undo it. The amgydala aren't normally very good at complying with cortical lectures.

That said, there is some fascinating evidence indicating that Buddhist mindfulness practice might not only lead to feelings of well-being as measured in left prefrontal cortex but that these very same practices may tame the amygdala. Ekman has found that experienced meditators don't get nearly as flustered, shocked, or surprised as ordinary folk by unpredictable sounds, such as loud gunshots. Indeed, there is some reason to believe that one subject, our old friend the meditating monk, in addition to not showing signs of being flummoxed, did not even move the five facial muscles that always move (at least a little) when the startling sound occurred. According to the standard protocol in such experiments, he was told that a loud noise would occur when the count backwards from 10 reached 1. He chose "one-pointed concentration" in one test and "open state" meditation in another. The monk reported the biggest experienced effect in the open state where he "moved" the expected loud noise far away so when it came it seemed a faint noise! Interestingly, it was during one-pointed concentration mediation that the most interesting physiological surprise occurred. The monk's heart rate and blood pressure, contrary to all expectations and unbeknownst to him, actually decreased. Of course, these results need to be replicated with larger populations, but again the preliminary findings are really interesting because gaining control over autonomic processes is thought by some to be well nigh impossible (without extensive cognitive-behavioural therapy).

Next consider the face reading results. The face-reading system is very complicated brain-wise. It involves the amygdala, visual cortex, frontal cortex and more,

and is not reflexive in the way that the startle response operates. We may well be innately biased to accurately read the basic emotions off faces. But proficiency at doing so takes time and experience. Children of severely depressed and/or alcoholic parents confuse angry and sad faces. However, because the facial muscles move in essentially the same ways across all cultures (modulated by local "display rules"), most of us (if we are paying attention) become pretty good at detecting the emotions expressed facially for the emotions actually being experienced. This is especially so when we are presented with photos in which various emotions are displayed or in simple one-on-one conversational settings. However, no one ever studied ($n > 5{,}000$) was any good at the following: show a fleeting image of a person displaying a basic emotion for long enough that it is detected and processed in the brain (between one-fifth and one-thirteenth of a second), but not long enough so that the person looking at it can report what she saw. Then ask the subject to pick out (i.e. "guess") which face from an array of pictures matches what was just flashed. The normal score is at random, that is, 1 in 6 correct answers/guesses. This is somewhat surprising because the literature on what is called "implicit memory" or "subliminal perception" often shows people respond above chance with similarly short, below-threshold stimuli, in other domains. But not with faces. However, to everyone's great surprise, the meditating monk and two other experienced meditators scored at two standard deviations above the norm, getting 3 or 4 out of 6 right! Ekman hypothesizes that some combination of meditative work on empathy and concentration explains these unusual results. Maybe. But if so, we have no clue as to *how* meditation causes such remarkable powers. Before we try to answer how the remarkable power is caused, we need first to replicate the very small sample evidence that such powers reliably exist among experienced meditators.

## The exemplary persons project

Subsequent to his own and Davidson's first studies of the meditating monk (and a few others), Ekman announced an "Extraordinary Persons Project" (Goleman 2003a: 19–21). His idea was to further advance the study of what he calls "emotional balance" by finding out what makes someone like the meditating monk tick. Ekman's hope is eventually to use whatever information is discovered to make emotional balance a workable aim in schools, prisons, indeed in society at large. Ekman developed a list of traits in order to find extraordinary persons to study. Although Ekman expects there to be extraordinary persons (EPs) in all cultures, he suspects them to be disproportionately represented by folk who have or are engaged in some sort of contemplative practice. The reason: such people are thought to have insight into their own minds and hearts and to be practiced in making mental adjustments.

Here are the traits:

1 EPs emanate a palpable sense of *goodness* or *virtue*.
2 EPs emanate a sense of *selflessness*. They display a lack of concern for their status, prestige, or fame.

3 EPs have what Tibetans call "*kundun*" or "*presence*." (Among Tibetans *Kundun* is the preferred name for the Dalai Lama). The presence is of the sort that others find compelling and nourishing and thus want to be around.
4 EPs have unusual powers of *attention* and *concentration*.

Ekman and his collaborators will, no doubt, soon begin reporting of findings from the "Extraordinary Persons Project" (see Ekman 2003, for some hints of what is to come). Already several lamas, in addition to "the meditating monk," have taken part in early studies (Lutz *et al.* 2004).

For present purposes, the main point I want to draw attention to about Ekman's list of traits is that he does not require EPs to feel or to be perceived as "happy," "very happy," or "extraordinarily happy." Since Ekman is interested in emotional balance, one might reasonably think that he expects EP's who have the four traits on the list to feel and to reveal a sense of such balance, perhaps to an extraordinary degree.

Is a well-balanced person of extraordinary virtue, selflessness, presence, and attentiveness automatically or necessarily, in virtue of possessing these qualities or traits, "happy" in the colloquial sense(s)? Nothing in his research program, as designed, assumes this. Furthermore, even if we assume that most EPs are likely to be "happy" in some sense of the term, colloquial and/or technical, we will still need to know what kind of happiness it is that they experience. Is it the same kind of happiness across EPs, or does the kind of happiness EPs experience vary some from $EP_1$, $EP_2$, . . ., $EP_n$? I hypothesize that it *should* differ depending on the specific personality, life history, and so on, of the particular EP, as well as between groups of EPs who, in the case of contemplatives, have different beliefs (in a personal God or not) and who conceive of wisdom and moral excellence in somewhat different theory-specific or tradition-specific ways.

It is worth emphasizing that Ekman's own work on Buddhist practitioners, aside from his collaboration with Davidson on the left pre-frontal cortex study, have *nothing* directly to do with measuring happiness – either happiness as understood in ordinary language or happiness as defined by Buddhism or some other ethical or spiritual tradition. Perhaps being unusually calm when a loud noise occurs relates to feelings of well being. For now, all we can say is that certain kinds of meditation can be used to screen off the effects of normally unpleasant stimuli. Regarding face reading, no evidence exists relating the ability to read below conscious-threshold facial stimuli *and* good feelings, happiness, let alone $\text{happiness}^{\text{buddha}}$. If the results are replicated, then the enhanced empathy hypothesis (probably combined with the enhanced attentiveness hypothesis) is a contender, but again empathy can, in certain individuals, be a source of some distress. In fact, Buddhist practitioners have long recognized this problem, so that there are techniques to ward off being afflicted by negative emotions that are not one's own. At this point there are no data on the effectiveness of such techniques.

I think Ekman's decision to leave "happiness" off the list of traits – at least for now – is a (possibly inadvertent) stroke of genius. It may be that the intersection

of the four required traits of exemplary persons do, as a matter of fact, normally or reliably produce some sort of happiness. But Ekman's project does not assume this. It wisely leaves it open to empirical investigation. If, as I have suggested, Buddhism claims to produce happiness$^{buddha}$ among practitioners who are wise and virtuous, then happiness of this sort ought to eventually reveal itself, given that EP's are chosen for study in part because they are extraordinarily virtuous.

## Other studies in the queue

There are other interesting studies underway that examine potential links between Buddhism and things other than "happiness." A group at Emory University, led by Guiseppe Pagnoni, is comparing Zen meditators with at least three years experience and controls with no such experience to measure attention, concentration, and problem-solving ability. If Zen meditators are better than the controls at these tasks, then perhaps Zen meditation techniques can be used on persons with attentional disorders, ADHD, for example, and possibly even for persons in the early stages of Alzheimers disease.

Meanwhile a collaboration between Richie Davidson and Jon Kabat-Zinn (2003; Rosenkrantz *et al.* 2003), with an $n = 25$, found that as little as 8 weeks of one hour daily meditation and three hours of weekly training produced positive effects on mood (as measured by leftward movement in prefrontal cortical activity) in the meditators (all of whom worked in stressful high-tech jobs), as well as increased immune function as measured by the number of influenza antibodies in meditators versus the non-meditating controls, where both groups had taken the flu vaccine.

The important point for now is that the Davidson and Kabat-Zinn study examined the link between Buddhism and both positive affect *and* positive immune system effects. Measuring changes in the immune system and changes in cognitive performance among those who practice one-pointed meditation and those who do not are completely tractable using existing psychophysical tools. However, studies allegedly establishing links between meditation and positive affect have yet to become sophisticated enough to tell us much about the kind of positive affect experienced and whether and how, if it does, positive affect connects with the kind of happiness that is alleged to come from virtue. Our ways of measuring brain function in a fine-grained manner that correlates activity with specific and various types of mental states is in its infancy. Note, for example, the debate over whether, and if so how and where, the amygdala process positive basic emotions (left or right, anterior or posterior). In 1999 Davidson and Irwin pointed out that resolving this question requires more powerful fMRI magnets than then existed. Now in 2004 a few sufficiently powerful magnets are coming on line, so the matter is becoming tractable.

Even now with magnets powerful enough to plot activity in the prefrontal cortex, we understand almost nothing about how to distinguish among the myriad of specific states that fall under the very general categories of positive affect or

good mood. That said, the meditating monk did show different kinds of neural activity when he was engaged in different kinds of meditation. It is way too early to know, however, whether the brain processes involved, say, in his meditation for compassion, correspond to the brain processes of other meditators engaged in compassion meditation and whether, and if so how, these are the same or different from the neural activity of non-meditators who experience or embody compassion. But it nicely reveals how work to specify in detailed ways what neural processes subserve what mental states will need to proceed.

In any case, it is completely unclear at this time whether and in what ways better immune function and better capacities to pay attention link up with happiness. They obviously link up to better health (a lower chance of catching the flu) and possibly with better school and job performance. It is easy to see how these might lead to a better life than the alternative. What link if any these things have to happiness in the relevant sense(s) needs to be worked out.

I don't mean to be understood as saying that the scientific work just described is too unrefined to be fruitful. My aim is first to emphasize that the extant research is heterogeneous in terms of what states of body or mind it targets. The work just discussed connects Buddhism to effects on the immune system *or* on attention, concentration, and cognition, *or* on suppression of the startle response, *or* on face reading. This work is not about the effects of Buddhism on happiness. Even the work that claims to be on happiness is not, in every case, at least obviously, *about* happiness. This is because positive mood or positive affect do not obviously equal happiness, even in the colloquial sense(s). The tools that we currently use are simply not powerful enough to yield fine-grained descriptions of the mental states of subjects that would enable us, for example, to say: "Look, there is the compassion. Notice how it looks different from lovingkindness." Combining various existing technologies, including doing assays of neurochemicals, might enable us to make such assertions after studying large populations of subjects. But that is a long way off.

## The metaphysical assumptions of contemporary neuroscience

Now that we have examined an array of research that claims to *measure* a variety of states produced by Buddhist practice, I can express more clearly the problem that concerns me about brain studies of happiness. In order to make the concern as clear as possible it is necessary to say something about the metaphysical background assumptions that guide this work.

Almost all neuroscientific work proceeds on either of two assumptions. The first view, *identity theory*, assumes that all mental states *are* in fact brain states. We access the surface structure of our minds first-personally, in a phenomenological manner, in terms of how a particular state seems or feels to us. But first-person access fails to get at the neural deep structure of our mental states. Only impersonal, or third-person, techniques can do this. Suppose "I see a red patch." According

to identity theory, my brain will reveal activity in visual cortex in areas that specifically compute "redness" and "patchiness." And there will also be some computation somewhere that marks, or is, the "I see." Then there will be some activity that is or represents where the components are bound (in psychology this is known as "the binding problem"), or come together to produce my unified perception. The complete neuroscientific picture of my perception of the red patch will reveal everything that is true of my subjective perception including causal and constitutive features of the perception that I am clueless about first-personally.

The second view, *the neural correlate view*, can be understood as quietistic or agnostic as far as commitment to metaphysical physicalism goes (the view that "what there is and all there is, is physical" i.e. matter and energy transfers). Although it claims that each and every mental state has certain distinctive neural correlates, it need neither endorse nor condemn the view that the subjective properties of every experience are reducible to or exhausted by the neural underpinnings of that experience. Perhaps subjectively experienced mental states have *sui generis* properties that are non-physical.

In addition, although proponents of the neural correlate view usually assume, as do proponents of identity theory, that there will be neural property correlates for all the features of mental states as detected first-personally, the view doesn't actually entail this. Since identity is not claimed, it is possible that mental states might be caused by, or correlated with brain states, but that the neural correlates do not contain specific matches (correlates) for each and every property revealed at the mental level.[11]

## Mental detection: content and causes

Whether one is an identity theorist or holds the weaker neural correlate view, one will need to do what Varela (in Petitot *et al.* 1999) calls "*neurophenomenology*." In simplest terms, neurophenomenology is the strategy of trying to explain the activity of the mind–brain by carefully gathering sensitive first-person phenomenological reports from subjects and then utilizing whatever knowledge and tools we currently possess in cognitive psychology and neuroscience to locate how the brain is doing what the subjects report experiencing.

There has been considerable success using neurophenomenological techniques in gaining insight into how the brain performs various *perceptual* tasks. Provide subjects with, for example, a familiar gestalt illusion, like a Necker cube, which if you look at it for a while produces the illusion that its front-becomes-its back, and vice-versa. Subjects are asked to press a button whenever they detect a "switch." The timing of the button pressing provides both a phenomenological report ("Now, it switched") as well as data on the moment it was perceived to switch. We then correlate the perceived switch times with measurements of activity in the brain areas that are known to be active and responsive to the illusion.

This is neurophenomenology. And it is pretty much the only show in town. One might look forever at the brains of people looking at simple line drawings known to produce perceptual illusions, but without phenomenological reports and reaction times that provide data on when the illusory percept happens, nothing other than the brain-doing-its-thing would be observed. There would be absolutely nothing on the mental side, absolutely zero, to relate the brain activity to!

This is why when we explore the conscious mind we must almost always use two kinds of probes. First, there is the subjective or phenomenological method of gathering first-personal information about what an experience *seems* or *feels* like. First-personally, we often report what *content* our state has – "I am happy because [Ben graduated from college today]." And we sometimes make surmises about the *causes* of the states with particular contents. In the example, the cause might be identical to the content: "I'm so happy *because* Ben graduated today." But often content and cause come apart. Suppose taking Prozac causes a person's mood to improve to the point that she finally appreciates once again good weather. She says, "what a beautiful sunny day." That (it is a beautiful sunny day) is the content of her mental state. But its cause of her positive mental state is due in some measure to the Prozac.

Do current techniques and technologies for studying the brain reveal any fine-grained details that correspond to what I call the content and the cause(s) of mental states as revealed first-personally? The honest answer is "no." Even if we grant that current techniques can detect positive affect, there is no technique that can distinguish contents of what we call "propositional attitude" states – states like "I believe that [p], I expect that [q], I am happy that [r], where p, q, and r are the propositional contents of the states."

My brain may light up "happily," but no brain technology can reveal that the content is that (Ben is about to graduate) as opposed to that (it is a cool and sunny day). First person phenomenological reports or behavioural observation can lead us to distinguish between two individuals, one who is happy that (she is working for *Medicins Sans Frontieres*) and the other who is happy that (he just made a million dollars on insider trading). Suppose, as is entirely possible, that their happy centers light up in the same way and to the same degree, neuroscience will reveal no such content difference. So content is a big problem – *terra incognita* for contemporary brain science.

Similar problems arise regarding the causes of contentful mental states. When the cause of a mental state lies in the past, say, in one's upbringing or in many years of practicing meditation, brain scans can't reveal the actual distal cause(s) because these lie outside the brain and in the past. Even supposing, as is plausible, that distal external causes leave neural traces, these are probably global and no one has a clue as to how to study or detect them. Problems in the psychology of perception require neurophenomenological methods and are exceedingly difficult to solve. But they are relatively simple when compared to the problem of finding neural correlates for complex cognitive and emotional states.

The main point about neurophenomenology and the study of happiness is that "true happiness," happiness$^{buddha}$ is characterized as having a certain cause and a certain content (with constituent structure, for example, the four illimitables). If there is such a thing as "true happiness," it is produced by enlightenment/wisdom and virtue/good. And first-personal detection (very humble detection) that one is enlightened and virtuous is at least part of the content of the happiness.

Assume that we gather a group of Buddhists of the same age, with the same amount of training, committed to the same kind of Buddhism, and so on. Can brain scans detect the "belief" states that constitute their enlightenment/wisdom? No. The problem could be due to current technologies or current psycho-neural theories of how, what, and where belief states are, or, most likely, both. In any case, we cannot at present see or measure or distinguish among such states. Can we distinguish among the virtues in the brain? No. Can we detect virtue, in general, in human brains? No. At present we are utterly clueless and without resources to do any such fine-grained analyses of the neural underpinnings of states of character. Here is the good news – if there is any prospect for doing so it will come from using the method of neurophenomenology, while at the same time we develop more sensitive methods, technologies, and theories for studying the brain.

## Ancient wisdom and new fangled gadgetry

It amuses me to think of Siddhartha Gautama looking down from nirvāṇa, heaven, the True Pure Land, or wherever, and observing all the activity attempting to study, confirm, or disconfirm the relation between Buddhist practices and various goods. I think he would be pleased both that Buddhism has over 500 million practitioners (roughly 1 in 12 people on earth) and that the hope it brings to alleviate suffering and to bring true happiness is being taken very, very seriously. I picture him a bit befuddled by all the new gadgets being used to measure all sorts of mental and bodily states as well as by a *Zeitgeist* that so relishes "empirical confirmation." But that aside, I like to think of Buddha as approving of what we are trying (still) to learn: how to end suffering, achieve enlightenment and goodness, and to find "true happiness."

Now is a propitious time to proceed with scientific studies on the connections between Buddhist practices and the various positive mental and physical states these practices are hypothesized to engender. The good news is that for immune response, sensitivity of the virtually automatic amygdala-based emotional system, facial expression detection, and cognitive task performance guided by one-pointed meditation, there are reliable fine-grained physiological, behavioural, and, in some cases, neurological measures than can be used.

As far as measuring and locating the neural correlates for the different types of happiness, we have a long and difficult row to hoe. We need to combine very sensitive phenomenological reports about the feeling and contours that comprise the heterogeneous kinds of happiness that ordinary speech picks out. Seligman's

(2003) research on "authentic happiness" holds promise for distinguishing among the multifarious kinds of happiness (as understood colloquially) by utilizing questionnaires that try to get clear and nuanced reports from subjects on their mental states (see also Easterlin 2003, 2004; Frank 2004).

We also need much more philosophical work of the sort I have attempted here in which different theory and tradition specific conceptions of "true happiness" receive articulation. We know that Aristotle, Epicurus, Buddha, Confucius, Mencius, Jesus, and Mohammed all put forward somewhat different philosophical conceptions of an excellent human life with somewhat different conceptions of what constitutes true happiness. With these different conceptions well-articulated, we can look at brain activity within and across advocates of different traditions to see what similarities and differences our mappings reveal. The same strategy should work for negative emotions and destructive mental states. Get well-honed first-person reports from subjects on the negative states they experience and then look for brain correlates. With such data in hand we can then test Buddhist techniques, say, meditation on compassion, which are thought to provide antidotes for anger, hatred, and avarice. Along with first-person reports on any experienced change in mood or emotion we can look and see what, if anything, reconfigures itself brain-wise. We can do the same for practices from other traditions. Eventually, we will want to coordinate such studies with the ever-deeper knowledge of the connections among virtue, mental health, well-being, and human flourishing, allowing science and philosophy to speak together about what practices seem best suited to make for truly rich and meaningful lives. At this distant point, with an array of conceptions of excellent human lives before us, as well as deep knowledge of how the brains of devotees of these different traditions look and work, we should be able to speak much more clearly about the nature of happiness and flourishing than we can now.

I have offered several reasons for a somewhat cautious, even indirect approach, to the study of happiness at the present time. For scientists: when studying a form of life or a practice that has its home in a form of life, specify very precisely what good(s) the life form or practice claims to offer and then explain in similarly precise detail what mental or bodily effects you claim to discover among practitioners. In concert with experts on the form of life proceed to more completely articulate what exactly it is that is being seen or revealed.

For the time being, we might follow Seligman's attitude toward the scientific status of the terms "*happiness*" and "*well-being*": "The word *happiness* is the overarching term that describes the whole panoply of goals of positive psychology. The word itself is not a term in the theory.... Happiness, as a term, is like *cognition* in the field of cognitive psychology or *learning* within learning theory. These terms just name a field, but they play no role in the theories within the field" (2003: 304).

The unease I have expressed about the theoretical usefulness, or lack thereof, of the colloquial concept of "happiness" ought to be shared by Buddhist practitioners

and Buddhist studies experts. Unless the concept of "happiness" is being put forward in a theory-specific way such as Buddhism and Aristotelianism both do (and as could be done for Trappist monks and "the Hedonist Club"), then we might for now be best advised to stop talking about it, at least to stop using the everyday term "happiness" in philosophical or scientific contexts. Scientists, like Seligman, are, of course, also entitled, indeed encouraged, if it is possible, to try to draw out and specify the ordinary understanding of the constituents of positive states of mind such as "happiness." They will then have regimented, in a precise way or ways, the meaning(s) of "happiness" according to folk psychology.

The more theory-specific conceptions of virtue, well being, and flourishing that we have, so much the better will our understanding be of the constituents of happiness. Overlapping consensus on the components of these things will, no doubt, reveal itself. Importantly, differences in conceptions of virtue, well being, and flourishing will also reveal themselves. The overlaps and the differences can be discussed and debated at the philosophical level from a normative ethical perspective, and the scientists can chime in, wearing philosophical hats if they wish, but equally important, telling us how the brains of practitioners from different traditions light up, which neurochemicals rise and fall, and so on.

Inter-theoretical conversation such as I am envisioning will put us in the exciting position of being able: (a) to have a better idea of the fine-grained states we looking for and, (b) to compare different theories in terms of the goods they claim to produce and hopefully do, in fact, produce.

For those of us who are convinced that Buddhism is a noble path to wisdom, virtue, and happiness$^{buddha}$, and especially at this time when some scientists claim to be reaching pay-dirt in the empirical exploration and confirmation of what many Buddhist practitioners already claim to know, it is necessary to speak with maximal precision about what practices, Buddhist and others, are thought to produce what sorts of specific positive states of mind and body. Overall, this sort of inquiry provides a truly exciting, unique, and heretofore unimagined opportunity for mind-scientists, practitioners, and philosophers from different traditions to join together in a conversation that combines time-tested noble ideals with new-fangled gadgetry to understand ourselves more deeply and to live well, better than we do now.

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## Notes

1 I use the terms "enlightenment" or "awakening" (*bodhi*) and "wisdom" (*prajñā*) interchangeably – often as enlightenment/wisdom. Strictly speaking, they are not exact synonyms. But using them interchangeably is quite common in the literature. The reader interested in following up the Buddhist sources consulted for this chapter is referred to the following references: Bodhi (1993, 2000); Ñāṇamoli (1995); Walshe (1987/1995); Śāntideva Padmakara Translation Group (1997); Grimes (1989); Davids and Stede (1993).

2 As I finish this chapter a new and important study has just appeared by Davidson's group (Lutz *et al*. 2004) in the prestigious *Proceedings of the National Academy of Sciences* (PNAS).

3 Two points: (1) A standard formulation is that nirvāṇa is the *ultimate end*. A possibly equivalent formulation is that enlightenment or awakening (*bodhi*) that results in the attainment of nirvāṇa is the *ultimate end*. One could take my formulation of the *ultimate end* claim as a way of saying what nirvāṇa is. My primary intention here is to provide a formulation of the *ultimate end* claim that will be useful to scientists. At the same time I want the claim to have credibility among Buddhists and Buddhist studies experts. (2) Some of these will fuss that the three formulations are not equivalent and I acknowledge that this is true on certain interpretations. I choose to avoid that imbroglio for now. I say release from "unwholesome attachment" rather than all attachment to mark a distinction I think important: there is a sense in which some form of wholesome attachment to the attainment of wisdom and virtue is constitutive of the dharma path. See Bhikkhu Bodhi's (2000) translation of the *Saṃyutta Nikāya*, pp. 1726–1728 for classical textual support for wholesome attachments.

4 *Bodhicāryavatāra*, ch. 1 verse 28, p. 37: I use Alan Wallace's (1993: 1) lovely translation.

5 Some Mahayanans would add a further component to enlightenment/wisdom, namely, the belief that all things are empty (*śūnyatā*).

6 I reject one all too common way of distinguishing the *bodhisattva* of Mahāyāna Buddhism from the *arahant* of Theravāda Buddhism, which involves claiming that the *bodhisattva* unlike the *arahant* takes her virtue into the world. Some Mahayanans will complain that although the *arahant* must work to develop her compassion and lovingkindness he might, in principle, do so in monkish seclusion. I don't see that the Pāli *Nikāyas* supports such a reading.

7 Damien Keown (1992/2001), writing from a Mahāyāna perspective, proposes that nirvāṇa can be understood as a state of virtuous enlightenment in this life.

8 There are two connected issues here, *the development issue* and *the individual difference issue*. The Buddha regularly called his teaching a gradual training (Bhikkhus Ñāṇamoli and Bodhi 1995: 34) and he consistently reveals great sensitivity to individual differences in his students. Moreover SN.4.235–237 (pp. 1283–1284) indicates that the highest happiness involves gradual training, the gradual destruction of the afflictions, four levels of awakening and suggests that the various stages of happiness of a bodhisattva unfold accordingly. As for the distinctive personality traits and life circumstances of particular individuals, the *Nikāyas* show that the arahants surrounding the Buddha had distinctive personality traits. This can be seen clearly in the *Mahāgosiṅga Sutta* from MN.1.212 ff.

9 See Lopez (1988) for an excellent scholarly overview of the bodhisattva's path and stages.

10 Before he passed away, Francisco ("Cisco") Varela, was Fondation de France Professor of Cognitive Science and Epistemology at the Ecole Polytechnique and the Institute of Neuroscience de Paris.

11 In a piece, "On the Luminosity of Being" (Gyatso 2003b), the Dalai Lama expresses doubt that, at least, in the case of states of "luminous consciousness," that *any* neural correlates will be found.

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# 9

# THE CO-ARISING OF SELF AND OBJECT, WORLD, AND SOCIETY

## Buddhist and scientific approaches

*William S. Waldron*

> The mind is neither within nor without, nor is it to be apprehended between the two.
>
> *Vimalakīrti-nirdeśa-sūtra* (30)

The ways in which the relationship between mind and world have been considered for the last few hundred years in Western thought and science are being radically reconceived and ideas from a wide variety of sources are now being taken more seriously than ever. Philosophical perspectives from the Buddhist traditions of India are of particular interest because they have long addressed issues that are currently in contention: if we are not Cartesian subjects essentially alienated from our bodies and the material world, as many have previously accepted, then who and what are we? And what then is the status of the "world" we purportedly stood against? Or our perceptions of it? Or the consequences of actions within it? And if the line between self and world is not nearly as clear or hard and fast as we have assumed, where or what is it?

We propose to address such questions by considering a wide range of ideas from Indian Buddhist traditions and various scientific fields. We shall find thinkers in both areas who have reached surprisingly similar conclusions on a number of key issues: they similarly conclude that (1) the "self" is a designation for interactive processes rather than the name of an autonomous entity, and (2) that cognitive awareness only arises as a result of interaction between subject and object, which are themselves, however, (3) ultimately inseparable.[1] These conclusions lead them to the counter-intuitive idea that (4) such awareness occurs neither solely inside nor wholly outside of the brain, but only at the interface of "self" and world. We are further surprised when we find thinkers in both these areas who therefore (5) understand the "world" as necessarily correlative with specific organisms or species, and then (6) go on to suggest similar causal

patterns – that is circular causality – whereby these "worlds" and species-specific awareness of them concomitantly come about (i.e. they co-evolve), (7) disclosing, for our human "world," the indispensable influences of language and society. And, finally, we are astonished to discover that some Buddhists and scientists agree that our sense of self, object, world, and society, (8) not only occurs mostly automatically and unconsciously, but also necessarily (9) includes the whole network of language users, past and present, leading them, at last, to (10) concur with the epigraph above that, at least for man, mind "hath no place to lay its head."

That these views are even comparable only becomes clear when they are seen in light of one another. That is, the startling implications of various scientific understandings of perception, world, and mind, could easily be overlooked if they were examined one by one, without the perspective that a well-developed and integrated worldview such as Indian Buddhism provides.[2] Conversely, the relevance, and ofttimes even the import, of basic Buddhist ideas could be occluded without the fresh perspectives that scientific inquiries into the arising of awareness provide.

We will pursue this mutual edification of Buddhist and scientific understandings of mind and world by pursuing a single line of inquiry to its logical, if vertiginous, conclusion: the idea that awareness arises in dependence upon an ultimately indefinite range of causes and conditions and is therefore a function neither of the subject by itself nor of the world alone. In this light, we shall see that our selves, our worlds, and our minds can be understood more fully and more deeply if we consider them not as autonomous entities originally existing apart from each other and only subsequently coming together, but rather as aspects of recurrent *patterns of interaction*s that concurrently arise.[3] The objects of such analyses, in other words, are not really *objects* at all, but specific, recurrent relationships. This perspective is most succinctly stated in the classical Buddhist formula of dependent arising (*paṭicca-samuppāda*), "When this is, that comes to be; with the arising of this, that arises. When this is not, that does not come to be; with the cessation of this, that ceases" (MN.2.32, etc.).

This shift in focus – reframing questions from "who did what to whom?" to "how do interactive processes come to occur?" – replaces the implicit metaphysics[4] of autonomous agents acting upon independent objects with a view of the complex and patterned arising of phenomena. This alone largely explains one of the most overlooked similarities between scientific and Buddhist modes of inquiry: that in their common attempt to understand not the essence but the arising of things, they have both found it *necessary* to dispense with the notions of substantive entities, unchanging essences[5] or independent agents altogether.[6] This is a momentous shift entailing ever-widening implications. We shall gradually draw out these implications by examining three aspects of interdependence: between self[7] and object, self and world, and self and society.[8]

## Interaction

Visual experience perhaps best illustrates this shift from substance to process, from things to relations; it is certainly the most thoroughly studied of the

five modes of sensory perception.[9] The examination of vision, though, whose apparent externality would most seem to secure our sense of a truly objective reality, ironically undercuts our everyday view of the world. For when we analyze the perceptual processes, we cannot find awareness either in an isolated subject apart from its object nor in an object apart from some subject.[10] Most Indian Buddhists and many cognitive scientists therefore conclude that we can ordinarily[11] only apprehend perceptual awareness as it arises *in conjunction* with its respective objects.

The prototypical Buddhist analysis of perception was expressed by the Buddha himself some 2,500 years ago: "Apart from conditions there is no arising of cognitive awareness" (MN.1.258). The most important conditions that Buddhists delineated are the sense faculties (*indriya*) and their correlative objects, as in this standard application of the formula of dependent arising: "visual cognitive awareness arises dependent on the eye and visual form" (SN.2.73). It is clear even in this simple formulation that "cognitive or perceptual awareness" (or, more commonly, "consciousness"; Pali: *viññāṇa*; Sanskrit: *vijñāna*) is *not* a faculty that actively cognizes objects, as it is in most philosophical traditions.[12] Rather, cognitive awareness is seen as the result of the interaction, or more precisely, the concomitance of a specific sense faculty[13] and its correlative object. Different modalities of cognitive awareness thus arise when different kinds of objects – five sensory and one mental – enter the cognitive range of, and thereby impinge upon, their respective sense faculties, provided that attention is present.[14] It is, in short, a process that occurs rather than an agent that acts.

An analysis of cognition as an interactive process is also advanced by many cognitive scientists. Lakoff and Johnson, for example, analyze color perception in exactly these terms.[15] "Color," they declare, "is not a thing or a substance out there in the world." Instead, it

> Arise[s] from the interactions of our bodies, our brains, the reflective properties of objects, and electromagnetic radiation. Colors are not objective; there is in the grass or the sky no greenness or blueness independent of retinas, color cones, neural circuitry, and brains. Nor are colors purely subjective; they are neither a figment of our imaginations nor spontaneous creations of our brains . . . Rather, color is a function of the world and our biology interacting.
>
> (Lakoff and Johnson 1999: 24–25)

If we take vision as paradigmatic of perception in general, then we may concur with Lakoff and Johnson that perceptual awareness is "neither purely subjective nor purely objective" (25). It is a function neither of the faculties by themselves nor of their objects alone, as idealism or realism would suggest, respectively.[16] Rather, as in the Buddhist analysis earlier, perceptual awareness is a result of the interaction between sense faculties and their correlative objects. This notion – that cognitive awareness arises only with the coming together of "the world and our

biology" – will serve as our conceptual point of departure and our recurrent *leitmotif*. First, biology.

## Sensory cognition

It is prosaic, perhaps even tautological, to note that knowledge depends upon a means of knowledge. We can only perceive what our organs and faculties enable us to perceive, and this in turn depends upon the kind of stimuli their physical structures are capable of responding to. This is what a "correlative object" means: a "visible object" is precisely that which can impinge upon the visual organ and elicit visual awareness. This appears to invert the usual roles of subject and object, though, because now it is not the objects that determine the form of sensory awareness, but rather the sensory capacities that determine the "object," that determine *what kind* of phenomena can even become a cognitive object.[17] Human eyes, for example, do not respond to ultra-violet or infra-red light, nor can most of us hear a dog whistle; we are blind and deaf to what other species can see and hear. In this fashion, just as our analysis of color perception undermines our sense that colors truly exist "out there," so too does an analysis of sensory awareness undermine the sense that we experience objects "out there." This merits further discussion.

According to many analyses, sense organs only function when the stimuli impinging upon them reach a certain threshold, triggering impulses in the receptor neurons that, via various mediating processes, register in the cortex.[18] When sufficiently strong, these result in a form of perceptual awareness. A number of implications follow from this simple process. First, the entire process is temporal; it is an event. By definition, a stimulus is something that evokes a *change* in the sense organ,[19] distinguishing it from its preceding state. And second, whatever stimulus leads to perceptual awareness is necessarily distinguished from its surrounding context. We do not, for example, normally notice subtle stimuli like the quick flicker of a fluorescent light or ambient stimuli like the steady hum of a fan since they are either too rapid or too regular to trigger our awareness – until there is a change. We only notice it when the hum stops. Similarly, if everything in our visual field were completely white (or completely black) nothing would be distinguishable from anything else and we would be effectively blinded, as in the blizzard condition called a "white-out." The arising of perceptual awareness thus depends upon the effervescent contrasts, the shifting *temporal and contextual distinctions* that disjunctively constitute stimuli, not upon some solitary stimulus existing in splendid isolation.

It appears then that the objects of our sense organs are not really objects at all; they only appear to be. This is tellingly illustrated in experiments tracing people's eyes as they scan a photograph. The eyes do not dwell on the "objects" in the picture, but follow their outlines, where the greatest contrasts lie. As Gregory Bateson (1979: 107) explains, "the end organs [of sense] are thus in continual receipt of events that correspond to *outlines* in the visible world. We *draw*

distinctions; that is, we pull them out. Those distinctions that remain undrawn are *not*." This then suggests a third point: that our everyday awareness of the world, what we see and hear and touch and smell, critically depends upon the distinctions our sense faculties are *capable* of "drawing" – indeed, the world ordinarily only appears in the forms they draw.

In this sense, cognitive awareness is both categorical and constructive. First, the receptor neurons of the sense organs, according to cognitive scientist, Christine Skarda (1999: 85), are "stimulus-specific in terms of their response characteristics. Each responds maximally (i.e. with a burst of intense electrical activity) to a specific type or class of stimuli," such as certain wavelengths or intensities of light, temperature, sound, etc. Even putatively "pure sensations" depend upon the elementary schemas that constitute the responsive structure of the sense organs. This initial process, however, only yields isolated neurological signals that at this stage do not yet amount to identifiable objects or characteristics.[20]

The features or categories that we actually experience, such as red or blue or hot or cold, are constructed in the next stage, the post-receptor level of neural processing. At this level the isolated signals from the receptor neurons are effectively juxtaposed, so that specific features become distinguishable. In this sense, Skarda continues, "features are dependent phenomena. Every feature acquires its unique nature as a feature *in a process of contrast*... Different frequencies of light acquire their unique color characters from being contrasted with one another" (86f.; emphasis added). When red is perceived in contrast with blue, for example, it is subtly different than when it is perceived in contrast with green. The distinctive features we perceive therefore neither exist in complete isolation from each other, for they are only distinguished contrastively, nor do they directly correspond with some "pure sensation," since they are also the end result of a series of complex, constructive neurological processes.[21] Neurophysiologist, Walter Freeman, explains this last point:

> The only patterns that are integrated into the activities of the brain areas to which the sensory cortices transmit their outputs are those patterns they have constructed within themselves.... They are not direct transcriptions or impressions from the environment inside or outside the body. All that brains can know has been synthesized within themselves, in the form of hypotheses about the world.
>
> (2000: 90)

This is crucial. Our sense organs are triggered by certain "*classes* of stimuli," which in turn only become perceivable features when they are contrastively distinguished. Lakoff and Johnson (1999: 18f.) thus conclude that such constructive "categorization is a consequence of how we are embodied... it is an inescapable consequence of our biological makeup... Categorization is thus not a purely intellectual matter, occurring after the fact of experience. Rather, the formation

and use of categories is the stuff of experience." Perceptual experience, in this view, is a function of the classificatory schemas our nervous systems necessarily embody and unavoidably employ. Our everyday "world" appears *already formed* by the categories that allow perception to occur in the first place.

These intriguing analyses, at the cutting edge of cognitive science, parallel Buddhist analyses of perception in a number of ways; in particular, Buddhists also analyze perception as involving both disjunctive and constructive processes, both differentiation as well as synthesis. First, as we have seen, Indian Buddhists considered perceptual awareness as a distinctive temporal event which occurs when certain requisite conditions come together, specifically, when an unimpaired sense organ is impinged upon by an appropriate object within its respective sense-field (*gocara*) and attention is present. The term translated as "cognitive awareness, '*vijñāna*,'' itself implies an awareness which arises in terms of distinctions. The Sanskrit prefix "*vi-*" (cognate with the Latin prefix "dis-") lends a disjunctive sense to the verbal root "*jñā*" ("to know"),[22] meaning, roughly, "discerning cognitive awareness." This disjunctive sense is highlighted in the classical definition of *vijñāna* as "perception of distinct [objects]."[23] Cognitive or perceptual awareness (*vijñāna*) in Indian Buddhist thought is thus temporally as well as contextually disjunctive, much as our cognitive scientists described it earlier.

The entire perceptual process, though, also includes categorical and constructive aspects. In most Buddhist analyses, discerning cognitive awareness (*vijñāna*) is nearly always accompanied by apperception (S: *saṃjñā*; P: *saññā*), a re-cognition or "knowing together" (*saṃ-jñā*; the Sanskrit prefix "*saṃ*" is cognate with Latin "con"), that brings together present sensation with previous knowledge or experience. It is defined, from the early systematic texts of Abhidharma on,[24] as the apprehension of a distinctive quality or characteristic mark (usually *nimitta*),[25] and is typically illustrated, interestingly enough, in terms of color categories: "it apperceives blue, it apperceives yellow, it apperceives red, and it apperceives white" (MN.1.293). But what makes these categories distinctive? They are derived, according to one text of the fifth to sixth century Yogācāra school, the *Triṃśikā-bhāṣyam*, by exactly the same contrastive processes our cognitive scientists have described:

> Apperception means apprehending the distinguishing mark (*nimitta*) of an object . . . The distinguishing mark is its distinction, the cause of deciding [if it is] a blue or yellow, etc., object. Apprehending [the mark] here means ascertaining "this is blue, it is not yellow."[26]

Since most Indian Buddhist schools consider apperception to invariably occur in every mundane moment of mind,[27] each perceptual event it thought to include both the differentiating process of discerning cognitive awareness (*vijñāna*) as well as the contrastively constructive process of apperception (*saṃjñā*).

As Sariputta, one of the chief disciple of the Buddha, declares in an early *sutta*:

> Feeling, apperception, and cognitive awareness, friend – these factors are conjoined, not disjoined, and it is impossible to separate each of these states from the others in order to describe the difference between them. For what one feels, that one apperceives; and what one apperceives, that one cognizes.
>
> (MN.1.293)

In short, both the cognitive scientists we have cited and the Indian Buddhists we have examined concur that disjunctive (*vijñāna*) as well as synthetic (*saṃjñā*) cognitive processes occur in nearly every perceptual event, corroborating psychiatrist Oliver Sacks' recent observation that "whether it is color or motion, a double process of breaking down and building up, or decomposition and recomposition – whatever one likes to call it – seems to be unavoidable."[28]

Couched in terms of our central themes, if cognitive awareness is indeed "a function of the world and our biology interacting," then its arising is clearly a function of the responsive structure of our sense faculties, our "biology," together with the correlative stimuli, the "world," which impinges upon them. These are not two essentially independent entities that just happen to come together, they are *two aspects of a single, integral event*.[29] Awareness of the world necessarily arises *in the very forms* – the distinctions and categories – determined by structures and functions of the neural processes that subserve it. There is, ordinarily, no other way that perceptions *could* appear. The categories that are the "stuff of experience" are the same categories that are the "stuff" of the world. It is our subsequent analysis that bifurcates them.

This, however, carries further, potentially unnerving implications. As we have seen from both the cognitive scientists and the Buddhists, the categories and distinctions that constitute cognitive awareness are not isolated objects. They do not denote independent, objective characteristics, but rather reflect contextually distinctive differences. Such differences, though, are relational, not substantive. And "difference," Bateson cautions, "*being of the nature of relationship, is not located in time or in space*" (1979: 109; emphasis added). Our awareness of the "world" rests upon slippery ground indeed.

## Worlds

These considerations radically challenge our ordinary notion of the "world," making it a phenomenon that must be understood interactionally rather than a reality that exists unilaterally. And if the way our "world" appears is a function of the structure of the sense faculties, then this apparent "world" is therefore also a function of the categories that constitute sensory awareness.[30] This perspective involves the same kind of inversion we saw between subject and

object above: it is not the "world" that determines the perceptions of an organism, but rather the perceptual capacities of the organism that determine its "world,"[31] its environment.

This is so in several senses. First, an "environment," as geneticist Richard Lewontin (2000: 48) points out, "is something that surrounds or encircles, but for there to be a surrounding there must be something at the center to be surrounded." In this sense, a "world" is always a world *for* someone. This seemingly simple point entails several interesting implications. Lewontin continues: "the environment of an organism is the penumbra of external conditions that are relevant to it, because it has effective interactions with those aspects of the outer world" (ibid.). An environment is thus defined by the organism, by the range of conditions any given organism can effectively interact with; if something cannot possibly affect that organism, it is not part of its "world." Biological philosophers Maturana and Varela therefore conclude "the domain . . . of interactions into which an organism can enter *constitutes its entire cognitive reality*" (1980: 10). An organism's "world" is thus not a simple reflection of some external, pre-existing objective reality. Rather, its cognitive reality – its "cognitive domain" as they call it – is defined by the range of its possible interactions, which in turn is determined by the organism's sense faculties, or more precisely, by *the implicit categorizations built into the responsive structures* of those faculties. Our "worlds" are correlative in that same ways that our objects are; here too "world and perceiver specify each other" (Varela *et al.* 1991: 172).[32]

But there is a deeper, even more historical way in which world and perceiver "specify each other." The cognitive capacities of organisms have only come into being through recurrent interactions with their relevant environments over the extended course of evolution, resulting in what biologists Tooby and Cosmides (1992: 72) call "the evolution of a mesh between the principles of the mind and the regularities of the world." In this perspective, a species never evolves all by itself, but only in tandem with its environment; that is, they co-evolve. Tooby and Cosmides thus conclude that it is "the environment as interacted with by the organism that, in a meaningful sense, can be said to be the product of evolution" (1992: 84). Maturana and Varela similarly suggest that "what evolves is always a *unit of interactions*" (1980: 12; emphasis added), neither a kind of organism by itself, and certainly not an environment alone, but always an organism-in-environment.

The "arising of the world" thus has two dimensions, one more or less synchronic, the other diachronic, both of which follow the same general pattern of arising.[33] The concomitance of subject and object gives rise, from moment to moment, to forms of cognitive awareness that are strongly determined by the specific structures of an organism's faculties – and this constitutes the arising of that organism's "world," its current cognitive domain. Similarly, the recurrent patterns of interaction between a species and its relevant environment give rise, over the long-run, to species-specific forms of cognitive awareness that are strongly determined by the evolved structure of that species' faculties – and this

constitutes the evolution, the long-term arising, of that species' "world," its species-specific cognitive domain.[34] We will discuss the relationship between these two shortly.

Once again, we find that Indian Buddhists conceived of the "world" and its "arising" in surprisingly similar ways, both synchronically at the cognitive level, as well as diachronically at the trans-generational level.[35] In early Buddhist texts one's experience of the "world" (*loka*) was effectively equated with the arising of cognitive awareness.[36] Much like our biologists, the Buddha defined our "world" in terms of the cognitive capacities of our sense faculties (plus mind):

> The eye . . . The ear . . . The nose . . . The tongue . . . The body . . . The mind is that in the world by which one is a perceiver of the world, a conceiver of the world. That in the world by which one is a perceiver of the world, a conceiver of the world – this is called the world in the Noble One's terms.
>
> (SN.4.95)[37]

"World" here conveys much the same sense as cognitive domain: it is co-terminus with the effective cognitive range of a sentient being. A "world" is thus also thought to arise, cease or be transformed in relation with the arising, cessation or transformation of one's cognitive faculties: "it is in this fathom-long body with its perceptions and thoughts that there is the world, the origin of the world, the cessation of the world, and the path leading to the cessation of the world," that is, the four Noble Truths (*cattāri ariyasaccāni* AN.2.48; SN.1.62).

A "world" then is not something static or limited by the current configuration of our cognitive faculties. Like cognitive domains, "worlds" also come into being diachronically over successive generations, or many lifetimes as the Buddhists put it. And this process occurs through the same dynamic interactions that give rise to the "world" synchronically, as depicted in the following formulation of dependent arising:

> Dependent on the eye-faculty and visual form, visual cognitive awareness arises; the concomitance of the three is sense-impression. Depending on sense-impression is feeling, depending on feeling is craving, depending on craving is grasping, depending on grasping is becoming, depending on becoming is birth, depending on birth, old age, death, grief, lamentation, suffering, distress and despair come about. *This is the arising of the world.*
>
> (SN.2.73)

For both the cognitive scientists and the Indian Buddhists we have cited these are parallel processes: the patterns of interaction that constitute the "arising of the world" in momentary, cognitive terms are the same patterns of interaction that constitute the "arising of the world" in longer, evolutionary terms.

But these processes are dynamic in another, more constructive sense as well. Cognitive awareness is not just a "function of the world and our biology interacting;" "the world and biology interacting" is also a function of the arising of cognitive awareness in ways that are all too easily overlooked. For there is a reciprocal *causal* relation between them such that cognitive awareness, though itself a result of these interactive processes, circles back to influence those very processes in its own right. And this is true for scientific as well as Buddhist thought.

## Feedback

Cognitive awareness, and by extension the embodied distinctions and implicit categorizations that constitute its moment-to-moment arising, is not merely epiphenomenal. The conditions that give rise to cognitive awareness also exert a crucial though indirect *causal* influence in the evolution of a species' cognitive domain by means of the behavior that awareness elicits, behavior that in turn influences the gradual evolution of that species' cognitive domain. This is not always obvious. In our perennial enchantment with unilateral determinants, such as genes, we easily underestimate the role that behavior plays in the evolution of life in general and of cognitive faculties in particular. Nevertheless, the influence of behavior – of actions and the cognitive processes that elicit and enable them – is absolutely central to the theory of evolution.[38]

According to evolutionary theory species evolve through differential reproductive success, the fact that certain organisms reproduce more than their conspecifics. This creates "a circle of positive feedback" (Carrithers 1992: 49)[39] whereby the conditions that contribute to this relative success – that organism's actions as well as the physiological and psychological structures that facilitate them – are reinforced and gradually developed over successive generations. In this way, each species' specific cognitive domain, its effective "world," gradually evolves in conjunction with its particular environment. The physiological and behavioral traits developed through this process are thus neither a simple reflection of some objective world, since they also reflect the effects of that species' behavioral patterns, nor are they the products of genes alone, since genes themselves only evolve in relation to particular environments.[40] Rather, these traits reflect the accumulative results of reproductively successful interactions between a species' ancestors and their natural and social environments over the long-term.

This is true for our human minds and bodies as well. Chief amongst these traits are the physical, cognitive and emotional capacities necessary for finding food and shelter, and for producing and protecting progeny. In other words, the drive to preserve one's personal existence, the desire for the activities that lead to reproduction, and sufficient craving for and defense of the means to achieve both these ends, have long been indispensable for producing, preserving, and re-producing human life. That these aims – for self-protection and sex, through attachment and aggression – were instrumental in the evolution of, and are

therefore powerfully present within, the forms of existence we embody right here and now directly follows from the basic postulate of evolutionary theory: what has been more reproductive in the past is more plentiful in the present. Such is the "arising of our world."

Indian Buddhists also thought that behavior – actions and their motivations – plays an important causal role in the evolution of living forms. In the words of one *sutra*, "the causes of living structures (*saṃskārā*) in the future are action, craving and ignorance."[41] More specifically, as the great fifth-century Buddhist philosopher, Vasubandhu, states: "it was said that the world (*loka*) in its variety arises from action (*karma*). (The effects of these) actions accumulate due to the power of the afflictive dispositions (*anuśaya*)" (AKBh ad V 1).[42] The "world" arises here from actions (*karma*) that are motivated by the "afflictive dispositions" – craving, attachment and aggression, and, underlying them all, a misguided view of our own existence (*satkāyadṛṣṭi*)[43] – the same sorts of behavior, with similar motivations, that evolutionary theory posits as instrumental in the evolutionary "arising of the world."

In Buddhist thought, too, this results in a "circle of positive feedback" wherein these afflictive dispositions are gradually reinforced by the very actions they instigate, and which together perpetuate the "arising of the world." The cyclic nature of these processes is reflected in the general Indian term for mundane existence, saṃsāra, literally "the going around," as well as in the extended formula of dependent arising itself, classically depicted in the famed Wheel of Life (*bhava-cakra*) murals found throughout Buddhist Asia. As Vasubandhu avers in the *Abhidharma-kośa*: "The mental stream," a euphemism for evolving individuals, "increases gradually by the afflictions and by actions, and goes again to the next world. In this way, the circle of existence is without beginning."[44] That these drives – these cravings, attachments and aggressions – were instrumental in the past arising of, and also therefore powerfully present within, our current forms of embodied existence, similarly follows from the basic postulate of the Buddhist world view. Thus, Vasubandhu continues from the passage cited earlier, "without the afflictive dispositions [actions] are not capable of giving rise to a new existence. Thus, the afflictive dispositions should be known as the root of existence (*mūlaṃ bhava*)" (AKBh ad V 1a).[45]

For both Indian Buddhists and evolutionary biologists, it is behavior – the sum total of one's actions and their aims – that brings about the "arising of the world" through patterns of cyclic causality, both in the cognitive short-term as well as in the evolutionary long-term. They both maintain, moreover, that what instigates and informs the potent actions that bring about these "worlds" is precisely that which constitutes and accompanies all ordinary forms of cognitive awareness: the embodied categorizations and the dispositions they evoke, that is, forms of sensual experience, an ingrained sense of self, and our endless self-aggrandizing efforts. Therefore, insofar as they serve to instigate the actions that perpetuate cyclic existence – the actions that lead to "living structures (*saṃskārā*) in the future" – then so far do these categories and dispositions *impart causal influences on*

*human evolution in their own right*. Simply put, there would be no human embodiment, no human "world," without the categories that have given rise to human forms of cognitive awareness and activity. The afflictive dispositions can, indeed, be considered the "roots of existence."

And what is the single most important source of human categorization and classification, whose predispositions equally pervade our physiological and psychological cognitive structures, and which gives rise to that most enduring and endearing affliction – our sense of independent, individual existence (*satkāyaḍṛṣṭi*) – for whose promotion and protection we commit all kinds of consequential actions, thereby affecting evolutionary processes and perpetuating the cyclic "arising of the world?" Language. The capacity to conceive of and cling to a sense of self as some "thing" separable from the larger processes in which we are inescapably enmeshed – a capacity that has literally helped make us who we are – would simply have been impossible without the advent of human linguistic communication.

## Language

In current thinking, human symbolic communication, that is, language,[46] neither sprung fully formed from the head of Zeus nor was divinely bestowed on man at the beginning of time. Like the arising of awareness, language evolved, neurophysiologist Terrence Deacon (1997: 409f.) observes, "neither inside nor outside brains, but at the interface where cultural evolutionary processes affect biological evolutionary processes." Language, and its influences upon human consciousness, culture and evolution, is thus also, and unavoidably, a product of "the world and our biology interacting." And, like cognitive awareness, it too reciprocally influences its own originating milieu.

First, keeping in mind the evolutionary processes outlined earlier, it is most probable that improvements in early man's communicative capacities, such as proto-language, would have improved the differential reproductive success of its users. As with other traits, these incipient linguistic abilities likely entered into the evolutionary "circle of positive feedback" and become gradually reinforced over time, until they eventually transformed our entire cognitive physiology. These changes centered on our increasingly enlarged prefrontal cortex, the locus of most higher cognitive processes. Language use and this "prefrontalization" continued to reinforce each other, so that this symbolic-linguistic mode of cognition has now come to influence other, originally nonlinguistic, modes, "even when our symbolic-linguistic abilities are un-involved" (417).[47] We no longer see and touch a purely physical object, a ball; we now see and touch something with a name and a function, a "ball."

Language use has thus subtly shifted our cognitive focus from the immediate world of sensory realities in front of us to the ethereal realms of symbolic imagination within and between us.[48] We are no longer naked apes living in trees on the savannah, but denizens of cognitive domains of our own devising, simultaneously

empowered and impaired by the now indispensable prostheses of language and culture. As anthropologist Clifford Geertz (1973: 49) elaborates,

> As our central nervous system – and most particularly its crowning curse and glory, the neocortex – grew up in great part in interaction with culture, it is incapable of directing our behaviour or organizing our experience without the guidance provided by systems of significant symbols . . . . To supply the additional information necessary to be able to act, we were forced, in turn, to rely more and more heavily on cultural sources – the accumulated fund of significant symbols. Such symbol[ic modes of communication] are thus not mere expressions, instrumentalities, or correlates of our biological, psychological, and social existence; they are prerequisites of it. Without men, no culture, certainly; but equally, and more significantly, without culture, no men.

In this widely accepted view, language is not simply added on to other, entirely separable cognitive capacities. Language is constitutive of all distinctively human cognitive processes.[49] In this sense, as well, we have no "pure sensation."

And just as our individual cognitive domains arise from moment-to-moment informed and instigated by our embodied categorical distinctions – which must now include the phonological, morphological, syntactic and semantic distinctions comprising language – so too has our species-specific cognitive domains arisen over evolutionary time insofar as the *capacity* for such distinctions have become embodied in human physiological and psychological structures. In other words, and echoing Geertz, there would be no distinctively human embodiment without the feedback cycle of evolution having been heavily influenced by the distinctions that underlie our uniquely human, that is our essentially linguistic, cognitive domain.[50] The distinctions comprising language have thus imparted *causal influences on human evolution in their own right*.[51]

Foremost amongst these categorical distinctions has undoubtedly been the capacity to conceive of oneself as an enduring locus of experience existing relatively independently of momentary stimuli and the awareness it instigates;[52] that is, to conceive of a *truly* independent self one must ignore the mutual dependency and inseparability of subject and object.[53] And this is only conceivable[54] because language allows us to fully objectify[55] ourselves in contradistinction from others and in relation to remembered pasts and imagined futures[56] – contextual and temporal relationships, Bateson reminds us, that *belie the very autonomy they appear to affirm*.

And it is this contradiction, with all its attendant obscurations, that lies at the heart of the human predicament. Just as we cannot (ordinarily) evade the categories that "are the stuff of experience" (Lakoff and Johnson 1999: 18f.), nor avoid the linguistification of experience even when "our symbolic-linguistic abilities are un-involved" (Deacon 1997: 417), so too, according to Deacon (416), we "cannot help but see the world in symbolic categorical terms, dividing it up

according to opposed features and organizing our lives according to themes and narratives." Our cognitive schemas virtually require us to see our thoroughly interdependent world "through the glass darkly" of independent entities, unchanging essences and substantive selves. "We are not just a species that uses symbols," Deacon decries, "the symbolic universe has ensnared us in an inescapable web" (436).

Indian Buddhists also expressed the intimate relationships between the cognitive processes associated with speech, the reflexivity of language, and a sense of autonomous self-existence, in terms of an ensnaring, symbolic feedback cycle centered on verbal or conceptual proliferation (P: *papañca*; S: *prapañca*). These processes revolve around the nature of mental cognitive awareness (P: *mano-viññāṇa*; S: *mano-vijñāna*), the sixth mode of cognitive awareness in standard Buddhist analyses. Like sensory cognitive awareness, mental cognitive awareness arises with the concomitance of a faculty and its correlative objects. That is, it arises in dependence upon *manas*, the faculty of mind,[57] and two distinct kinds of objects: sensory awareness and *dharma*s, phenomenon such as thoughts or ideas. The first object consists of the five forms of sensory awareness themselves. For example, when a moment of sensory awareness arises it often instigates a mental awareness *of* that sensory awareness,[58] one that is reflexively aware "*that* such and such a sensory awareness has occurred."[59] We not only see, but are aware that we see. This reflexive nature of mental awareness is only explicitly related to language, however, in regard to its second object, *dharma*s as thoughts or ideas. When mental cognitive awareness arises with these as objects, it is invariably accompanied by thought and reflection (*vitakka-vicāra*),[60] both of which are considered activities of speech (*vitakka-vicāra vacisaṅkhārā*, MN.1.301).[61] Thus, the reflexivity of mental cognitive awareness bridges both ordinary sensory awareness and more language-dependent cognitive processes (indeed, for some schools *vitakka-vicāra* accompanies all moments of sensory awareness[62]).

As with language itself, however, this relation tends to invite endless rounds of conceptual proliferation.[63] One early discourse reads:

> Dependent on the eye and forms, visual-cognitive awareness arises. The meeting of the three is contact. With contact as condition there is feeling. What one feels, that one apperceives. What one apperceives, that one thinks about (*vitakketi*). What one thinks about, that one conceptually proliferates (*papañceti*). With what one has conceptually proliferated *as the source* (*nidāna*), apperceptions and notions tinged by conceptual proliferation beset a man with respect to past, future, and present forms cognizable through the eye, [and so on, up to:] mind-objects cognizable through the mind.
>
> (MN.1.111f.)[64]

Here, the arising of cognitive awareness (P: *viññāṇa*; S: *vijñāna*) and apperception (P: *saññā*; S: *saṃjñā*), which occur in nearly every cognitive process

(MN.1.293, earlier), evoke cogitation (*vitakketi*, the verbal form of *vitakka*) and conceptual proliferation (*papañca*). And this conceptual proliferation in turn serves "as the source" (or cause, *nidāna*) for further apperceptions and notions regarding other objects of cognitive awareness, and so on.

Language then – with its endlessly proliferating concepts and classifications – not only attends most cognitive processes, but also gives rise to its own a runaway recursivity. In fact, conceptual proliferation is so bound up with the basic components of perception – with contact,[65] apperception and thought[66] – that it serves as a synonym for cyclic existence as a whole.[67]

And here, too, the most deeply entrenched of these recursive possibilities is a view of one's own self-existence (P: *sakkāyadiṭṭhi*; S: *satkāyadṛṣṭi*), the view that we are or have an underlying entity or enduring self (P: *attā*; S: *ātman*). As one early text declares, the thought " 'I am' is a proliferation; 'I am this' is a proliferation; 'I shall be' is a proliferation" (SN.4.202f.). Indeed, the early Pali text, the *Sutta-nipāta* (Sn. 915–916), calls the thought "I am" the root (*mūla*) of proliferation itself. In fact, the underlying disposition towards this notion "I am" (*asmīti-anusaya*) is so deeply entrenched in our psyches that it is considered the last "fetter" to be removed on the path to liberation:

> So, too, friends, even though a noble disciple (*ariya-sāvaka*) has abandoned the five lower fetters, still, in relation to the five aggregates subject to clinging, there lingers in him a residual conceit "I am," a desire "I am," an underlying disposition "I am" that has not yet been uprooted.
> (SN.3.131)

We are ensnared, it seems, in a web of circles within circles. We seem bound to a notion of enduring, autonomous selfhood which only arises within a reflexively proliferating symbolic system that disjunctively distinguishes it from others, and that is itself based upon a reflexive cognitive system which only arises in regard to temporal, contextual and categorical distinctions. Our vaunted "in"-dependence depends upon distinctions based upon distinctions. But distinctions, we recall, are relational not substantive, fleeting not enduring; in Bateson's words, they are "not located in time or in space." No wonder Deacon (1997: 452) wryly remarks that:

> It is a final irony that it is the virtual, not actual, reference that symbols provide, which gives rise to this experience of self. The most undeniably real experience is a *virtual* reality . . . its virtual nature notwithstanding, it is the symbolic realm of consciousness that we most identify with and from which our sense of agency and self-control originate.

## Unconscious processes

The fact that *both* our sense of self as well as our distinctively human cognitive domains arise in dependence upon linguistic communication entails two more

far-reaching consequences: that much of what influences the "arising of our selves and our world" occurs unconsciously, yet at the same time operates intersubjectively. Both of these insights are shared by some cognitive scientists and some Indian Buddhists.

The obvious place to start talking about language is that, legends aside, we do not start off talking. Language is only gradually acquired during the first few years of life through sustained interaction with our immediate caretakers, a cognitive development that irrevocably distinguishes us from our nonlinguistic primate cousins. In the words of Michael Tomasello (1999: 123), who studies both primate cognition and human language acquisition, "the process of acquiring and using linguistic symbols fundamentally transforms the nature of human cognitive representation." By having acquired language, "the language user partitions her world into discrete units of particular kinds" (150), that is, into "the categories and perspectives and relational analogies embodied in that language" (189). This includes such simple "units" as nouns, verbs, and adjectives, as well as the causal and relational assumptions implicit in all complex syntactic structures and, indeed, the very possibility of taking multiple perspectives. *This* is our distinctively human cognitive domain.

These categories and perspectives, however, usually operate indiscernibly and involuntarily. Through years of acquisition and use, the "categories and relations embodied in one's language" have become embedded in specific neurological pathways and structures within each person's cognitive system, which then continuously serve as the unseen yet indispensable basis for all symbolic-linguistic processing, enabling us to comprehend most language most of the time without consciously contrasting phonemes or parsing pronouns. Thus, Lakoff and Johnson (1999: 18) conclude that these and other forms of "categorization [are], for the most part, not a product of conscious reasoning .... We do not, and cannot, have full conscious control over how we categorize."

One of the most entrenched of these implicit categorizations, as we have seen, is our view of ourselves as separable entities. This, too, operates mostly unconsciously and largely involuntarily. "We all grow up," according to Lakoff and Johnson (1999: 268), "with a view of our inner lives that is mostly unconscious, [and] used every day of our lives in our self-understanding." But this view of self, they continue, is "both internally inconsistent and incompatible with what we have learned from the scientific study of the mind" (ibid.) – not least because its reliance upon linguistic distinctions belies its basic conceit of separate existence. Linguistic reference, after all, not only functions disjunctively, by distinguishing "self" from "other"[68] and "subject" from "object," but also only operates intersubjectively, relying upon the understanding of other speakers – without whom there would of course be no language in the first place.[69] In short, both the "arising of our human world" and our sense of ourselves as truly autonomous selves depend upon the implicit, and hence effectively unconscious, linguistic categorizations and classifications that underlie our moment-to-moment

cognitive processes, which themselves depend upon the community of speakers with whom we have learned to share such concepts, contrasts, and syntactic constructions.[70]

The arising of our distinctively human "world" then is based not only upon long-term influences that we cannot fully discern, that is, the physiologically-based linguistic structures that have evolved through extended organism-environment interaction, but also upon more recently acquired influences that also operate unconsciously, that is, the neurologically-based linguistic structures developed through extended social interaction. And all these influences underlie and inform every moment of waking awareness.[71] Our world arises of its own accord, in all its apparent objectivity.

Here, too, Buddhists in classical India arrived at remarkably similar conclusions. Building upon the Buddha's analyses of the dependent arising of cognitive awareness (*vijñāna*) in the fifth century BCE, such as we have examined earlier, Buddhist thinkers of the Yogācāra school in the fourth to fifth century CE conceived of the dependent arising of *unconscious* cognitive awareness, namely an *ālaya-vijñāna* or "store-house" consciousness. As formulated in the classical treatises of the brothers, Asanga and Vasubandhu, this "*ālaya*" – "home, base, or store" – awareness operates in ways remarkably similar to the unconscious processes described earlier: supported by physiological and linguistic structures that have been built up through the constructive, cyclic processes of organism–environment interaction (i.e. saṃsāra), this subtle level of awareness simultaneously supports and informs all moments of conscious awareness, is closely associated with unconscious conceptions of self, and, perhaps most intriguingly, also encompasses an intersubjective, endlessly proliferating, yet still subliminal dimension of the arising of our common, collective "world."

These characteristics are most succinctly articulated in several early Yogācāra texts: the *Saṃdhinirmocana Sūtra*, a second to third century CE *sūtra* attributed by Mahayana Buddhists to the Buddha himself, the *Yogācāra-bhūmi*, an encyclopedic text attributed to Asanga but likely compiled between the third and fifth centuries CE, and Asanga's own *Mahāyāna-saṃgraha*. *Saṃdhinirmocana Sūtra* V.2 first outlines the complex conditions that support the arising of this form of underlying, subliminal awareness:

> In cyclic existence with its six destinies such and such beings are born as such and such a type of being. They come into existence (*abhinirvṛtti*) and arise (*utpadyante*) in the womb of beings.... There, at first, the mind with all the seeds (*sarvabījakaj cittam*, a synonym of *ālaya-vijñāna*) matures, congeals, grows, develops, and increases[72] based upon the two-fold substratum (or "appropriation,"[73] *upādāna*), that is,
>
> (1) the substratum of the material sense-faculties along with their supports (*sādhiṣṭhāna-ṛūpīndriya-upādāna*),

(2) and the substratum which consists of the predispositions toward conceptual proliferation in terms of conventional usage of images, names, and conceptualizations (*nimitta-nāma-vikalpa- vyavahāra-prapañca-vāsanā-upādāna*).[74]

This dense passage summarizes much of what we have seen earlier. Forms of unconscious mental processes not only evolve through long-terms patterns of cyclic causality operating over multiple generations, but they also arise and develop from moment-to-moment in dependence upon several supporting conditions: the traditional condition of the sense-faculties, along with their embodied cognitive schemas, as well as a condition newly articulated by this school, the predispositions or impressions (*vāsanā*) of the names and concepts of ordinary language, along with its propensity toward conceptual proliferation (*prapañca*).

This *ālaya* awareness also arises in conjunction with the second traditional condition for the arising of cognitive awareness: a correlative cognitive object. The *Yogācāra-bhūmi* describes this as the "outward perception of the surrounding world, whose features are undiscerned (*bahirdhā-aparicchinnākāra-bhājana-vijñapti*)," a perception which arises based upon the first two conditions, now called "inner appropriation."[75] In other words, this form of "subtle" (*sūkṣma*) cognitive awareness continuously arises based, on the one hand, on the living sense-faculties and the predispositions or impressions instilled by past linguistic experience, conceptualization, naming, etc., in conjunction with, on the other hand, an "undelineated surrounding world," a cognitive domain whose features remain obscure.[76]

This subliminal mode of cognitive awareness does not usually occur alone, however, for it also simultaneously supports all supraliminal mental processes. In the Yogācāra view, the 6 traditional modes of cognitive awareness (5 sensory, 1 mental) no longer arise solely in dependence upon their own respective faculties and correlative objects, as in most Buddhist analyses, for they also arise supported by this *ālaya* awareness.[77] Sensory cognitive awareness in this model is, therefore, never *simply* sensory. As in Deacon's and Lakoff and Johnson's analyses, sensory awareness is also indelibly influenced by the linguistic predispositions – the classifications, conceptualizations, etc. – that accompany the arising of subliminal awareness.

As our earlier analyses would also suggest, however, if linguistic categories and concepts underlie (nearly) all modes of awareness, subliminal as well as supraliminal, then we are predisposed (*vāsanā*) to the same conceptual prolixity (*prapañca*), the same ensnaring recursivity that language invites at unconscious levels as well. Accordingly, our sense of self, the view of self-existence (*satkāyadṛṣṭi*) which arises out of the reflexivity of linguistic and symbolic representation, is now also thought to occur automatically and unconsciously in nearly every moment of mind[78] – and with the same ensnaring consequences. The *Yogācāra-bhūmi* thus warns that as long as one "is not freed from the bondage of perception in regard to distinguishing marks (*nimitta*)"[79] – that is, as long as

one remains constrained by the unconscious schemas underlying ordinary perception – then so long will *all* our forms of cognitive awareness be indelibly informed by the distinction between "self" and "other"[80] and thereby subtly motivated by the underlying disposition toward the sense "I am." And insofar as this conduces toward karmically consequential actions, so far does this entrenched self-view keep us caught in cyclic existence, endlessly spinning further webs of ensnaring signification. The view "I am," we recall, was called the root (*mūla*) of proliferation (*papañca*; Sn.915–916), and the afflictive dispositions the root of existence (*mūlaṃ bhava*; AKBh ad V 1a). In this way, the underlying disposition toward the sense "I am," "that is mostly unconscious, [and] used every day of our lives in our self-understanding" (Lakoff and Johnson 1999: 268), is seen to have *compelling causal efficacy in its own right*.

## Intersubjectivity

At this point, our search for the conditions underlying and informing the "arising of the world" has opened up well beyond the range of each individual's cognitive processes. If language use, together with the symbolic selves it enables and the afflictive actions it in turn instigates, is constitutive of our distinctively human world in the way that Indian Buddhists and our cognitive scientists suggest, then the conditions for the arising of our world are much broader than most of us can readily comprehend. For "symbolic reference," Deacon (1997: 452) submits, "is at once a function of the whole web of referential relationships and of the whole network of users extended in space and time." But where in the world do these distinctively human modes of cognitive awareness arise if they arise in conjunction with "the whole web of referential relationships" and "the whole network of users"? Here, too, we find some scientists and some Buddhist thinkers responding similarly to these curious questions.

We have interpreted the notion of "world" (*loka*) as a "cognitive domain," the possible range of experience of any given organism or species that has come about through recurrent interaction between that species and its broader natural and social environments. In this sense, our distinctively human world, the cognitive domain brought about through language, is inescapably intersubjective, and therefore both richly interconnected and radically decentered at the same time. We live in a "shared virtual world," Deacon declares, precisely because "the evolution of symbolic communication . . . created a mode of extrabiological inheritance . . . [that] is intrinsically social," one that evolved, we remember, "neither inside nor outside brains" (Deacon 1997: 409f.). And it is language that is the diffusing yet unifying medium of this common cognitive domain, that bridges not only percept and concept,[81] nature and culture, but also self and society – the last of the three interdependencies mentioned at the onset of this chapter.

Indian Buddhists also interpreted the "arising of the world" in terms of intersubjective experience facilitated by language. They distinguished between the *sattva-loka*, the world of sentient beings, which beings experience individually

by virtue of their biological particularity, and the *bhājana-loka*, the "receptacle" or surrounding world, which classes of beings experience similarly by virtue of their cognitive commonality.[82] In Indian Buddhist traditions, as we have seen, both these "worlds" result from the accumulated actions (*karma*) of sentient beings. For some schools, such as the Yogācāra, the world of individual beings (*sattva-loka*) results from actions committed by individuals, while the shared, surrounding world (*bhājana-loka*) results from actions beings commit in common.[83] Until such actions ripen into their respective "fruits," the potential to experience these results are metaphorically symbolized as "seeds" stored within the "store-house" consciousness (*ālaya-vijñāna*). Asanga's *Mahāyāna-saṃgraha*, therefore, correlates these two kinds of seeds – the potential for experiencing either a shared "world" or an individual "world" – with two distinct aspects of subliminal awareness, which he accordingly call the common (*sādhāraṇa*) and uncommon (*asādhāraṇa*) aspects of *ālaya-vijñāna*, respectively.[84] We could not experience our common, surrounding world, one of the commentaries explains, if we did not have such "seeds" in common, that is, if we did not have similar potentialities to experience such similar "worlds."[85] In other words, we would not have a similar "environment," a similar cognitive domain, which affords a similar range of experiences if we did not have fundamentally similar influences operating at subliminal levels of our awareness.

But if each individual's "world" is largely determined by its own previous actions, its own previous karma, then why would our "worlds" have anything in common at all? The traditional answer is that each individual's previous actions were similar enough to have resulted in sense faculties that are similar enough to afford a similar range of experience, that is, a common cognitive domain. The second commentary to the *Mahāyāna-saṃgraha* (*ad* I.60), states this quite explicitly:

> [The statement] "the common [aspect of *ālaya* awareness] is the seed of the shared world" means that it is the cause (*kāraṇa-hetu*) of perceptions (*vijñapti*) which appear as the shared world. It is common because *these perceptions appear similarly to all who experience them through the force of maturation* (*vipāka*) *that is in accordance with their own similar karma*.[86]

In other words, the similar actions of individual beings results in the capacities to perceive the world similarly. And what makes these actions similar? Actions that are informed by similar conditions and instigated by similar intentions give rise, over the long-term and in the aggregate, to similar results, including the capacities to experience a similar "world." And why might these conditions and intentions be similar?

It is language use, via the shared aspect of *ālaya* awareness that provides the similar conditions that give rise to our shared world, our common cognitive domain. According to both commentaries on the *Mahāyāna-saṃgraha*, our

underlying cognitive processes (*ālaya-vijñāna*) are imbued with the impressions or predispositions of language (*abhilāpa-vāsanā*) on the basis of which manifest cognitive awareness (*vijñāna*) arises in regard to expressions of selves (*ātman*) and phenomena (*dharma*), etc., *due to the special power* (*śakti-viśeṣa*) of the impressions of conventional expressions (*vyavahāra*).[87] That is to say, that the shared conventions of language (*vyavahāra*), which delineate the world into discrete objects and categories, as Tomasello so well described earlier (1999: 123), similarly yet unconsciously shape the way our conscious awareness of the world arises. And, to the extent that our "world" is similarly construed, it conduces to similar actions, similar karma, which in turn result in similar "worlds." As the *Mahāyāna-saṃgraha* (*ad* I.60) states, the shared aspects of subliminal awareness (*ālaya-vijñāna*) give rise to similar perceptions of our "world" in accordance with our own similar karma.

Language use thus constructs our common "world" insofar as it is instrumental both in the long-term evolution of specifically human cognitive domains, as well in the moment-to-moment arising of common forms of cognitive awareness in general and of our symbolic selves in particular – the latter of which, we have seen, is thought to accompany each and every moment of mundane consciousness. But if this commonality of cognitive awareness depends upon our common linguistic structures, where or how then, finally, does such awareness arise? Where indeed does language reside? This line of inquiry leads Deacon (1997: 452f.) to vertiginously aver that, in the end, "A person's symbolic experience of consciousness . . . is not within the head . . . This [symbolic] self is indeed not bounded within a mind or body . . . [it] is intersubjective in the most thoroughgoing sense of the term." Not only does symbolic awareness depend upon language, but the most crucial condition for its arising seems to be diffused throughout "the whole network of users extended in space and time."

From the Buddhist point of view, though, this is hardly some big happy love-fest. Since our intersubjective symbolic selves depend upon language, they are susceptible to the same runaway recursivity, the same profuse prolixity (*prapañca*) that all language is. The impressions of speech, which have the "special power" to give rise to cognitive awareness in regard to expressions of selves, *dharma*s, etc. are never fully "used up" (*anupabhukta*), *Mahāyāna-saṃgraha* I.61.2 declares, precisely because "*the seeds of the impressions of language give rise to conceptual proliferation since beginningless time*," without which, it warns, "the new arising of the impressions of language would be impossible."

In other words, linguistic recursivity is the generative matrix from which springs forth profusions of possible worlds, further enfeebling any sense of a singular, external reality we might unambiguously apprehend, on the one hand, while continuously ensnaring us in its endlessly proliferating symbolic webs, on the other. As Tomasello (1999: 107) observes, not only does "the perspectival nature of linguistic symbols multipl[y] indefinitely . . . ," but "the intersubjective and perspectival nature of linguistic symbols actually undermines the whole concept of a [single] perceptual situation by layering on top of it the multitudinous

perspectives that are communicatively possible for those of us who share the symbol" (132). That is, thanks to language use, our linguistified symbolic awareness is both everywhere and nowhere at the same time.

This recursive discursiveness that language evokes operates on a number of levels: not only synchronically, between subliminal and supraliminal forms of cognitive awareness, but also diachronically, between our previous linguistic experience and our present proclivities, conditioned as they are by impressions of language. These two operate both within a single lifetime, and, in Buddhist or biological terms, over multiple lifetimes or countless generations. What the *Mahāyāna-saṃgraha* is now proposing, consonant with Deacon and Tomasello, is a third, largely unconscious yet thoroughly *intersubjective* feedback system, which, like the first two dimensions of cyclic causality, continuously proliferates and perpetuates individual cyclic existence, but which also, unlike them, connects us all through our common experiences of a shared, surrounding "world." And it is this, Deacon declaims (1997: 427), that "gives us the ability to share a virtual common mind," one that effectively encompasses "the whole network of users extended in space and time." Ironically yet undeniably, this points to a path beyond the bonds of an alienated individuality supposedly separable from the surrounding world, and suggests the possibility of much more encompassing conditions for the arising of cognitive awareness. We may perhaps more fully appreciate the apophasism of Vimalakīrti's epigraph, which declares that "mind is neither within nor without, nor is it to be apprehended between the two." It is, like all interactive phenomena, "like a dream, a phantom, a drop of dew, a flash of lightening."

It is said that when one sees through the false duality of subject and object, when one sees their inseparability, their "emptiness" in Yogācāra terms, then the veils obscuring our interdependent world are removed and one sees things, as the Buddhists says, "as they are" (*yātham bhūtam*). This insight is said to liberate from unfounded fears, insatiable desires and the mistaken views they depend upon. This is true, presumably, however those veils may be removed.

## Notes

1 "What is objective acquires its objective status only in relation to what is subjective" (Skarda 1999: 90).

2 We will only be citing here Indian Buddhist traditions up to the Yogācāra school, *c.* fourth to fifth centuries, CE. All general statements about "Buddhism" are to be qualified accordingly.

3 As physicist Norbert Wiener (1950: 96) observes, "We are not stuff that abides, but patterns that perpetuate themselves."

4 This view is no less metaphysical for being so firmly entrenched in science and "common sense." As Stern (1995: 79f.) observes: "In the *Philosophical Remarks*, Wittgenstein . . . maintains that the subject–predicate grammar of our everyday language has such a firm grip on us that we are usually quite unaware of its influence."

5 "The sciences, while developing their own modified or novel meanings of definition, have abandoned the concept of *essence*... Science is not interested in essences. A modern physicist cannot define matter; but he can handle it, and can do so because his predecessors eventually learned that the essence does not signify. He understands the behavior of matter not because he knows what matter is – for he does not; but because he has learned how it operates, and how it changes" (Smith 1962: 143).

6 Simply put, something that never changes cannot be the specific cause of a particular change. How, for example, could an unmoving billiard ball ever cause another ball to move? Unchanging essences, therefore, can have no causal role in the arising of things.

7 We are well aware of the irony of speaking of "self" in a Buddhist context, and do so in concession to popular usage (*vyavahāra*). As should be clear in what follows, it carries no substantive implications.

8 Our rhetorical strategy is similar to that expressed by Eleanor Rosch in her recent article, "Reclaiming Concepts" (1999: 71, n. 1): "Note that I am starting with *mind* and *world* as those terms are generally used and attempting to guide the reader toward a different (arguably better) understanding of such matters."

9 We are drawing upon, among others, Freeman (2000), Skarda (1999), and Varela *et al.* (1991).

10 It is only "when mind and world are considered separate," Eleanor Rosch (1999: 74) observes, that "causal or explanatory efficacy is attributed either to the mind or the world."

11 This marks another of the parameters of our chapter. In what follows, we will only be discussing Buddhist analyses of mundane mental processes. Although Buddhist traditions hold that certain states of mind ultimately transcend worldly consciousness, these are not sufficiently commensurate with scientific perspectives for us to make useful comparisons at this time.

12 This is explicitly expressed by Vasubandhu (Pruden 1990: 118), in his fifth-century classic, the *Abhidharma-kośa*:

> The sutra teaches: "By reason of the organ of sight and of visible matter there arises the visual consciousness"; there is not there either an organ that sees, or visible matter that is seen; there is not there any action of seeing, nor any agent that sees; this is only a play of cause and effect. In the light of [common] practice, one speaks, metaphorically, of this process: "The eye sees, and the consciousness discerns." But one should not cling to these metaphors.

13 Reflecting Buddhist usage, we take "faculty" (*indriya*, literally "governing," "power") as inclusive of both the specific sense organs, such an eye or ear, as well as the neurological processes connected with that specific sensorium (which Buddhist analyses generally do not further specify).

14 MN.1.190: "When internally the eye is intact and external forms come into its range and there is the corresponding engagement, then there is the manifestation of the corresponding class of consciousness" (Ñāṇamoli 1995: 284).

15 It is important to distinguish between color as a perceptual experience, and the physical nature of light. As Skarda (1999: 82) remarks, "with respect to perceptual system functioning, 'physical reality' refers to things like light or sound waves and neural activity, while 'perceptual reality' refers to the product of perceptual functioning, i.e. the percept... [L]ight and its physical properties are not colours."

16 "Consciousness... should not be identified with the subjective sphere, as idealism claims, or with the objective sphere as materialism and scientific realism claim" (Skarda 1999: 91).

17 We say "appears to invert" because a rejection of naive realism does not in itself entail an affirmation of idealism. As Skarda (1999: 80) cautions, while

> all *perceived* features and objects are the *products* not the causes of perceptual processing . . . rejection of naive realism does not imply . . . a form of subjectivism, for it does not claim that the percept is merely subjective. Subjectivism [also] violates the principle . . . that all phenomena (whether physical or mental) are inexorably embedded in a causal network of reality. The notion of a cut off or private (acausal) interiority is essentially meaningless.

18 Freeman (2000: 65–90).

19 Concise Oxford English Dictionary (Oxford 1976: 1130) defines stimulus as "a thing that evokes a specific functional reaction in an organ or tissue."

20 "This cannot happen in the receptor layer," Freeman (2000: 81) explains, "because those neurons do not interact."

21 Skarda (1999: 87): "the discreteness of components of the phenomenal event created by sense organs . . . is not copied from that event, it is bestowed on it by virtue of the isolated way in which it is used by receptor neurons." Also see note 17, earlier.

22 Thus the standard translation of the Sanskrit prefix "*vi-*" into Tibetan is "*rnam*," "different, distinct, individual" (Das: 757) and into Hsüan Tsang's Chinese is "*fen*," to divide, share, separate, distinguish (Mathew's CED: 269, #1851).

23 *Vijñāna prativijñapti* (*Abhidharma-kośa*. I.16. Poussin. 1.30). The *Yogācāra-bhūmi* (Tib.189b4f.) has a similar definition (*rnam par shes pa ni yul* so sor *rnam par rig pa 'i mtshan nyid gang yin pa'o*). Perhaps the most common definition in the early texts is "[one] cognizes, therefore it is called cognitive awareness" (MN.1.292. *vijānāti ti kho tasmā viññāṇa ti vuccati*). *Milinda's Questions* (1963–1964: 85) defines *vijñāna* similarly:

> whatever material shape (*rūpa*) a man sees he discriminates it by consciousness, and whatever sound he hears, whatever smell he smells, whatever tastes he savours, whatever touch he feels, and whatever mental state he discriminates, he discriminates it by consciousness. Even so, sire, is discriminating the distinguishing mark of consciousness.

24 For example, the *Dhammasangaṇi* (7f.):

> What on that occasion is apperception (*saññā*)? The apperception, the apperceiving, the state of having apperceived which on that occasion is born of contact with the appropriate element of mental cognitive awareness [*mano-viññāṇa*]-this is the apperception that there then is

(terminology slightly altered for consistency). (*Katamā tasmiṃ samaye saññā hoti? Ya tasmiṃ samaye tajjāmanoviññāṇadhatusamphassajā saññā sañjānanā sañjānitattaṃ-ayaṃ tasmiṃ samaye saññā hoti*; translation altered slightly for terminological consistency) Rhys Davids' note on this is also relevant:

> Here, if we follow the C[ommentar]y. (Asl. 110), *saññā* means simply that sense-perception which discerns, recognises and gives class-reference to (upaṭṭhita-visaya), the impressions of sense . . . The essence of *saññā* is said to be recognition by way of a mark.
>
> (Ibid.: 7f.)

25 *Milinda's Questions* (1963–1964: 84): "Reverend Nāgasena, what is the distinguishing mark of apperception?" "Apperceiving, sire, is the distinguishing mark of apperception. What does one apperceive? One apperceives dark green and one apperceives yellow and one apperceives red and one apperceives white and one apperceives crimson" (terminology altered slightly for consistency).

26 *Saṃjñā viṣaya-nimitto udgrahaṇaj. Viṣaya ālambanaṃ... nimittaṃ tad viśeṣo nīlapī tādyālambana vyavasthākāraṇam. tasyo udgrahaṇaṃ nirūpaṇaṃ nīlam etan na pītam iti.* (*Trijwika-bhāsyam*, 1925, 21). Tib.: *'du shes ni yul la mtshan mar 'dzin pa 'o / yul ni dmigs pa 'o / mtshan ma ni de'i bye brag / sngon pa dang / ser po la sogs pa dmigs pa rnam par bzhag pa'i rgyu 'o / de la 'dzin pa ni 'di sngon po nyid yin gyi ser po ni ma yin no zhes rtog pa 'o.*

27 While the Yogācārins, for example, held that there are five omnipresent factors associated with every moment of mind (*citta-saṃprayukta-sarvatraga*): attention, sense-impression, feeling, apperception, and intention (*manaskāra, sparśa, vedanā, saṃjñā, cetanā*), the Theravādins reckoned there were two additional ones (individuality of object (*ekaggatā*) and life faculty (*jīvitindriya*), while the Sarvāstivādins included an additional five – desire, discernment, discriminatory awareness, recollection or mindfulness, determination, and concentration (*chanda, mati, prajñā, smṛti, adhimokṣa, samādhi*) – resulting in ten processes operating in each mind-moment. (AKBh *ad* II 24–29; Shastri, 186; Poussin, 153–156,161–169; Hirakawa *et al.* 1973, Vol. I. xii–xxiv; *Compendium*, 94–96; Chaudhuri 1983: 105–108).

28 "Letter to Editor." *New York Review of Books*, April 8, 2004, p. 85.

29 Rosch (1999: 72): "The subjective and objective aspects of concepts and categories arise together as different poles of the same act of cognition and are part of the same informational field."

30 Lakoff and Johnson (1999: 26):

> cognitive science and neuroscience suggest that the world as we *know* it contains *no* primary qualities in Locke's sense, because the qualities of things as we can experience and comprehend them depend crucially on our neural makeup, our bodily interactions with them, and our purposes and interests.

31 This does not, however, entail idealism or subjectivism. See note 16.

32 Cognitive scientist, J. J. Gibson, in a tellingly entitled tome, *The Ecological Approach to Visual Perception* (1979: 116), similarly observes that

> to perceive the world is to coperceive oneself... The optical information to specify the self... accompanies the optical information to specify the environment... The one could not exist without the other... The supposedly separate realms of the subjective and the objective are actually only poles of attention. The dualism of observer and environment is unnecessary.
>
> (Cited in Rosch 1999: 71)

33 This idea of similar causal patterns operating in disparate dimensions is found in other fields as well. Gregory Bateson (1979: 164), for example, similarly argues that "evolutionary change and somatic change (including learning and thought) are fundamentally similar."

34 Maturana and Varela (1980: 12), "The evolution of living systems is the evolution of the niches of the units of interactions defined by their... organization, hence, the evolution of the cognitive domains."

35 This reflects the well-known distinction between two dimensions of dependent arising: the momentary (*kṣaṇika*) dependent arising in which all 12 members of the standard formulation occur concurrently, and in which birth and death are interpreted metaphorically; and the extended dependent arising of conditions (*āvasthika*), in which the same 12 members are interpreted as conditions or states occurring sequentially over three distinct lifetimes (AKBh, *ad* III 24d; Poussin: 65f.).

36 See Collins (1982: 43–45) for the early Vedic sense of *loka* as a multidimensional "world" constructed by human action (*karma*), particularly ritual action.

Ñāṇananda (1971: 84) well describes the nuanced way in which this term is used in Buddhist thinking:

> the world is what our senses present it (to) us to be. However, the world is not purely a projection of the mind in the sense of a thorough going idealism; only, it is a phenomenon which the empirical consciousness cannot get behind, as it is itself committed to it. One might, of course, transcend the empirical consciousness and see the world objectively in the light of *paññā* [wisdom] only to find that it is void (*suññā*) of the very characteristics which make it a 'world' for oneself.

37 We have altered the translation of *vinaya* from "Discipline" to "terms," consistent with one of its core meanings (PED: 623). A similar passage states (Sn. 169): "the world (*loka*) has arisen through the six [sense-modalities, including mind], it is made known through the six." Note that the "world" is known through faculties that are themselves "in the world," not by faculties existing apart from it.

38

> The study of behaviour has now emerged as one of the most central issues in modern evolutionary analysis. With hindsight, it is easy to see why this should be so. After all, natural selection and genetic change depend, as we now interpret Darwin, upon the way in which an animal behaves since its behaviour, in particular everything leading up to the act of reproduction and later the protection of offspring, determines the direction of evolution as a result of differential breeding rates.
>
> (Nichols 1974: 264)

39 A pattern which neurophysiologist, Terrence Deacon (1997: 352), notes "has been invoked by most theories of human cognitive evolution."

40

> Evolution shapes the relationship between the genes and the environment such that they both participate in a coordinated way in the construction and calibration of adaptations. Thus, evolutionarily patterned structure is coming in from the environment, just as much as it is coming out from the genes.
>
> (Tooby and Cosmides 1992: 86)

41 Cited in AKBh ad (VI. 3. Shastri 887): *Karma ca tṛṣṇā atho avidyā saṃskārāṇāṃ hetur abhisaṃparāye iti.*

42 AKBh *ad* V 1 (Shastri 759; Poussin 106). This refers to a previous passage in the same text: AKBh *ad* IV 1.a (Shastri 567; Poussin 1): *sattvabhājanalokasya bahudhā vaicitryamuktaṃ tat kena kṛtam?... sattvānāṃ karmajaṃ lokavaicitryam*. See also AKBh *ad* II 56b, 57b, and Schmithausen (1987: 203).

43 Though not fully developed in the earliest Buddhist literature, the afflictive dispositions were carefully analyzed in later traditions. The Theravādin Abhidhamma (*Dhammasangaṇi, Visuddhimagga*, etc.), for example, enumerates ten (see Nyanatiloka 1977: 77), while the *Abhidharmakośa* (V 1c-d) gives a basic list of six, all of which overlap with the Theravādin list (attachment, aggression, ignorance, pride, false view, and doubt), as well as offers an expanded list of ten (*ad* V 3), wherein 'false view' (*dṛṣṭi*) is divided into five: (1) view of self-existence (*satkāyarṣṭi*), (2) extreme views (*antagrāhadṛṣṭi*), that is, eternalism and nihilism, (3) false views based on wrong ideas (*dṛṣṭiparāmarśa*) (4) false views about the efficacy of rules and rituals (*śīlavratatparā marśa*), (5) false views about causality (*mithyādṛṣṭi*). See, for example, Guenther and Kawamura, *Mind in Buddhist Psychology* (1975: 64–81).

44 AKBh III 19a-d (Poussin 57–59; Shastri 433–434): *yathā akṣepaṃ kramād vṛddhaḥ santānah kleṣakarmabhiḥ... paralokaṃpunar yāti... iti anādibhavacakrakam*. This is

illustrated in another text, *Milinda's Questions* (70f.): "The Elder traced a circle [*cakka*] on the ground and spoke thus to King Milinda: 'Is there an end to this circle, sire?' " "There is not, revered sir." "Even so, sire, are those cycles [*cakka*] that are spoken of by the Lord: 'Visual consciousness arises because of eye and material shapes, the meeting of the three is sensory impingement; conditioned by sensory impingement is feeling; conditioned by feeling is craving; conditioned by craving is kamma [karma]; vision [*chakkhu*, lit.: eye] is born again from kamma' – is there thus an end of this series?' 'There is not, revered sir.' .... 'Even so, the earliest point of [saṃsāric] time cannot be shown either.' "

45 AKBh ad V 1a (Shastri 759; Poussin 106): *karmajaṃ lokavaicitrayam iti uktam. tāni ca karmāṇi anuśayavaśād upacayaṃ gacchanti, antareṇa ca anuśayān bhavābhinirvartane na samarthāni bhavanti. ato veditavyāḥ mūlaṃ bhavasya anuśayāḥ.*

46 Note that our cited authors use "linguistic" and "linguistic system" nearly interchangeably with "symbolic" and "symbol system," of which language is the most paradigmatic example.

47 "Brain-language co-evolution has significantly restructured cognition from the top-down...," Deacon (1997: 417) argues, such that "its secondary effects have also ramified to influence the whole of human cognition...even when our symbolic-linguistic abilities are uninvolved."

48 Cognitive scientist, Michael Tomasello (1999: 126) argues that, "The way that human beings use linguistic symbols thus creates a clear break with straightforward perceptual or sensory-motor representations, and it is due entirely to the social nature of linguistic symbols."

49 Tomasello (1999: 215),

> the uniquely human forms of thinking...do not just depend on, but in fact derive from, perhaps even are constituted by, the interactive discourse that takes place through the medium of intersubjective and perspectival linguistic symbols, constructions, and discourse patterns.

50 As neurophysiologist Deacon (1997: 409f.) observes, "it is simply not possible to understand human anatomy, human neurobiology, or human psychology without recognizing that they have all been shaped by something that could best be described as an idea: the idea of symbolic reference," that is, by language.

51 As anthropologist Roy Rappaport (1999: 5) has suggested, "It would not, indeed, be an exaggeration to claim that humanity is [language's] creation."

52 Lakoff and Johnson (1999: 268):

> The very way that we normally conceptualize our inner lives is inconsistent with what we know scientifically about the nature of mind. In our system for conceptualizing our inner lives, there is always a Subject that is the locus of reason and that metaphorically has an existence independent of the body. As we have seen, this contradicts the fundamental findings of cognitive science.

53 As psychiatrist, Hundert (1989: 107) notes,

> What is crucial here is the reciprocal nature of the developments of the capacity to have unitary subjective experiences and the capacity to experience unitary permanent objects. By studying the behaviour of infants, Piaget showed that, in normal human development, the notion of permanent *objects* and the notion of a separate *self* who is experiencing those objects develop together. From the starting-point of symbiosis, the origins of self and object proceed apace.

54 Such "self-representation..." Deacon (1997: 451) argues, "could not be attained without a means of symbolic representation," that is, without language.

55 Tomasello (1999: 195),

> There are thus two basic levels of knowledge and understanding... First is the kind of knowledge that humans share with other animals... The second level derives from a representational redescription of this procedural knowledge... Systems of thought emerge from this reflexive activity because self-observation employs all of the categorization and analytic skills that are employed in perceiving, understanding, and categorizing the outside world – in effect the subject perceives, understands, and categorizes her own cognition facilitated by the fact that it is expressed externally in language.

56 As sociologist, Anthony Giddens (1991: 53f.), observes:

> Self-identity... is not something that is just given... but is something that has to be routinely created and sustained in the reflexive activities of the individual... A person's identity [depends upon]... the capacity *to keep a particular narrative going*.

57 Derived from the Sanskrit root "*man*," "to think, believe, imagine, suppose, conjecture," *manas* (P: *mano*) is related to the Latin "*mens*," "mind, reason, intellect," and ultimately to the English "mind, mentation" and "to mean" (PED: 515, 520; SED: 783).

58

> Friend, these five faculties each have a separate field, a separate domain, and do not experience each other's field and domain, that is, the eye faculty, the ear faculty, the nose faculty, the tongue faculty, and the body faculty. Now these five faculties, each having a separate field, a separate domain, not experiencing each other's field and domain, *have mind as their resort, and mind experiences their fields and domains*.
>
> (MN.1.295)

59 The *Abhidharma-kośa*, for example, states that "visual-cognitive awareness is aware of blue, but not 'that it is blue'; mental cognitive awareness is aware of blue and aware 'that it is blue' " (AKBh *ad* III 30c–d. *cakṣurvijñānena nīlaṃ vijānāti, no tu nīlam; manovijñānena nīlaṃ vijānāti, nīlam iti ca vijānāti*).

60 Sn. 834 speaks of considering viewpoints *in* the *manas* (*manasā diṭṭhigatāni cintayanto*) and SN.1.207 of the "thoughts of *mano*" (*manovitakkā*) (Johansson 1965: 183, 186).

61 Reat (1990: 305), "Language was thought of as a discovery of the inherent conceptual relationships among things, so that from a very early period in Indian thought, conceptualization was regarded as primarily a verbal phenomenon."

62 In the *Abhidharma-kośa*, the five sense consciousness are said to be always conjoined with *vitarka* and *vicāra* (thought and reflection). (AKBh *ad* I. 32; Shastri, 88; *savitarkavicarā hi pañcavijñānadhātavaḥnityam ete vitarkavicarābhyāṃ saṃprayuktāḥ*). Two other schools, the Mahīśāsakas (thesis 11), and Dārṣṭāntikas (thesis 23), also argue that *vitarka* and *vicāra* accompany sense consciousness, but the Sarvāstivādins (thesis 95) and the Theravādins reject this (Bareau 1955: 275, 277).

63 See Ñāṇananda 1971 for a book-length treatment of this important concept in the early Pāli sources.

64 Ñāṇamoli (1995: 203) Translation altered slightly for terminological consistency.

65 AN.2.161, "Whatever is the range of the six spheres of contact, that itself is the range of prolific conceptualization (*papañca*). And whatever is the range of the prolific conceptualization, that itself is the range of the six spheres of contact" (Ñāṇananda 1971: 21).

66 Ñāṇananda (1971: 25) describes the reciprocity between the proliferation–apperception series '*papañca-saññā-saṅkhā*' and thought (*vitakka*) itself:

> the word or concept grasped as an object for ratiocination, is itself a product of '*papañca*.' This, in its turn breeds more of its kind when one proceeds to indulge in conceptual proliferation (*papañca*). Concepts characterized by the proliferating tendency (*papañca-saññā-saṅkhā*) constitute the raw-material for the process and the end product is much the same in kind... Thus there is a curious reciprocity between '*vitakka*' [thought] and '*papañca-saññā-saṅkhā*' – a kind of vicious circle, as it were. Given '*papañca-saññā-saṅkhā*', there comes to be '*vitakka*' and given '*vitakka*' there arise more '*papañca-saññā-saṅkhā*.'

67 *Bodhisattvabhūmi* (35, 2): *prapañcaḥ saṃsāra ity arthaḥ*. Cited in Schmithausen (1987: 510); see also 509ff., n. 1405, and 522ff., n. 1425.

68 Deacon (1997: 100), "Because symbols do not directly refer to things in the world, but indirectly refer to them by virtue of referring to other symbols, they are implicitly combinatorial entities whose referential powers are derived by virtue of occupying determinate positions in an organized system of other symbols."

69 Tomasello (1999: 106), in fact defines "a linguistic symbol" as "a communicative device understood intersubjectively from both sides of the interaction."

70 Tomasello (1999: 126), "The way that human beings use linguistic symbols... is due entirely to the social nature of linguistic symbols."

71 Our understanding of the our "world" then must take into account three causal dimensions simultaneously, "human beings have cognitive skills that result from biological inheritance working in phylogenetic time; they use these skills to exploit cultural resources (i.e. language) that have evolved over historical time; and they do this during ontogenetic time" (Tomasello 1999: 48).

72 Tib.: *sa bon thams cad pa'i sems rnam par smin cing 'jug la rgyas shing 'phel ba dang yangs par 'gyur ro*. Sanskrit reconstruction by Schmithausen: *(*sarvabījakaṃ cittaṃ*) *vipacyate saṃmūrcchati vṛddhiṃ virūḍhiṃ vipulatāṃ āpadyate*. This closely parallels passages found in Pāli texts, SN.3.53, DN.3.228: *viññāṇaṃ... viddhiṃ virūḷhiṃ vepullam āpajjeyya*. (Schmithausen 1987: 356, n.508).

73 Comprised of the prefix "*upa*," "towards, near, together with," plus the noun "*ādāna*," "receiving, taking to oneself" (SED), *upādāna*, may refer to both an active process and a passive product, both a conditioning and a conditioned state. It is not only "grasping, attachment, finding one's support by, nourished by, taking up," but also "fuel, supply," "the material out of which anything is made," or even "substratum by means of which an active process is kept alive or going" (Apte: 471; PED: 149). See also Schmithausen (1987: 72).

74 All the Sanskrit terms in this passage are reconstructed from the Chinese and Tibetan. Schmithausen reconstructs this last phrase as *nimitta-nāma-vikalpa-vyavahāra-prapañca-vāsanā upādāna*. The import of this dauntingly long (and proliferating!) string of concepts is well summarized in Schmithausen's definition (1987: 357, n. 511) of the first term, *nimitta*, as "in this context, objective phenomena as they are experienced or imagined, admitting of being associated with names, and being (co-) conditioned by subjective conceptual activity (*vikalpa*), which has become habitual so that it permeates all (ordinary) perceptions and cognitions."

75 *Pravṛtti-Portion* (D.3b7–4a3; T.580a2–12): 1.b)A.2.

> The "outward perception of the external world, whose aspects are undiscerned" (**bahirdhā-aparicchinnākāra-bhājana-vijñapti*) means the continuous, uninterrupted perception of the continuity of the world based upon that very *ālaya-vijñāna* which has inner appropriation as an object. 1.b)A.2.

> Thus, one should know that the way *ālaya-vijñāna* [arises] in regard to the object of inner appropriation and the object of the external [world] is similar to a burning flame which arises inwardly while it emits light outwardly on the basis of the wick and oil, respectively.

76 Skarda's (1999: 83) notion of "phenomenal fabric" is suggestively similar:

> Sense organs alone do not create the percept. The percept is the articulated phenomenal event as that articulation is used by the whole organism . . . The "phenomenal fabric" is but the cloth out of which the percept is articulated . . . Its phenomenality consists in the fact that it is a complex, but as yet undifferentiated, sensory content *directly apprehended by* the organism without the intervention of neural activity. It is not articulated into features nor is it as yet "objectified" by the sense organ, and hence is not to be identified with the percept, but it is the phenomenal basis for all subsequent levels of perceptual system functioning.

This parallels certain characteristics of *ālaya-vijñāna*. *Ālaya-vijñana's* objects are not only undifferentiated or undelineated, but this *ālaya* awareness is also said to pervade the whole body.

77 *Saṃdhinirmocana Sūtra* (V.4–5), "The six groups of cognitive awareness . . . arise supported by and depending upon (**saṃniśritya pratiṣṭhāya*) the appropriating consciousness (*ādāna-vijñāna*; another synonym of *ālaya-vijñāna*)."

78 *Pravṛtti-Portion* of the *Yogācāra-bhūmi* (D.5a7f; P.6a5f; T.580b29f, 1019c6f):

> the mind (*manas*) whose mode is conceiving (*manyana*) "I-making" (*ahaṃkāra*), the conceit "I am" (*asmimāna*), always arises and functions simultaneously with *ālaya-vijñāna* . . . That [mind] has the mode of taking *ālaya-vijñāna* as [its] object and conceiving [it] as "I am [this]" (*asmīti*) and "[this is] I" (*aham iti*).
>
> 4.b)A.1.(a)
>
> The mind which was explained above always arises and functions simultaneously with *ālaya-vijñāna*. One should know that until it is completely destroyed it is always associated with the four afflictions (*kleśa*, following Chapter) which by nature arise innately (*sahaja*) and simultaneously: a view of self-existence (*satkāyadṛṣṭi*), the conceit "I am" (*asmimāna*), self-love (*ātmasneha*), and ignorance (*avidya*).
>
> 4.b)B.4

This is the genesis of what will later be called "afflictive mentation" (*kliṣṭa-manas*). Here, too, the Sanskrit terms are all reconstructions.

79 *Pravṛtti-Portion* (D. 5b4–6; T.580c9–13); 4.b)A.2.: *yid kyi rnam par shes pa de ni yid la brten pa zhes bya ste/ rgyu mtshan gi yid ma 'gags na rnam par rig pa 'i 'ching ba mi 'grol la/ 'gags na ni de 'grol ba 'i phyir ro*. See Schmithausen (1987: 486f., n.1293–1298).

80 *ad* MSg I.58 (Bh. 336c9f; bh 169a2): *gang gis bdag zhes bya ba dang / bzhan zhes bya ba'i bye brag 'dir 'gyur par byed do*.

81 "Although the contents of meaning are largely social in origin, the mechanisms of meaning are biological and have to be understood in terms of brain dynamics" (Freeman 2000: 9).

82

> Living organisms respond to only a small fraction of the stimuli impinging on them . . . In this way each living system builds up its own distinctive world according to its own distinctive structure . . . The range of interactions a living system can have with its environment defines its "cognitive domain." . . . cognition is not

> a representation of an independent, pregiven world, but rather a bringing forth of a world . . . not *the* world, but *a* world, one that is always dependent upon the organism's structure. Since individual organisms within a species have more or less the same structure, they bring forth similar worlds.
>
> (Capra 1998: 269f.)

83 AKBh *ad.* IV 1.a. (Shastri 567; Poussin 3. 1: *sattvānām karmajaṃ lokavaicitryam*). Also *ad* II 56b, 57b. Asanga's *Abhidharma-samuccaya* (ASBh) (T.31.679b24B7, P.102b6B8 f.): *las thun mong ba zhes kyang 'byung/ las thun mong ma yin pa zhes kyang 'byung / . . . thun mong ba gang zhe na/ gang snod kyi 'jig rten rnam par 'byed pa 'o// thun mong ma yin pa gang zhe na/ gang sems can gyi 'jig rten rnam par 'byed pa 'o*.

84 MSg I.60, "The common [aspect of *ālaya-vijñāna*] is the seed of the receptacle world (*bhājana-loka*). The uncommon [aspect of *ālaya-vijñāna*] is the seed of the individual sense-spheres (*prātyātmikāyatana*)." The term for "common," "*sādhāraṇa*," means "having or resting on the same support or basis" (SED: 1202).

85 (Bh 337a28ff; bh 169b5), *de lta bu 'i rnam pa can gyi kun gzhi rnam par shes pa med na gang sems can thams cad kyi thun mong gi longs spyod kyi rgyur gyur pa snod kyi 'jig rten yod par mi 'gyur ro*.

86 *ad* MSg I.60 (U 397c12f; u 267a8–268a1), *de la thun mong ni snod kyi 'jig rten gyi sa bon gang yin pa 'o / / zhes bya ba ni snod kyi 'jig rten du snang ba 'i rnam par rig pa rnams kyi byed rgyu 'o / / thun mong ba ni rang gi las dang mthun pa 'i rnam par smin pa 'i dbang gis de la spyod pa po thams cad la der snang ba 'i rnam par rig pa skye ba 'i phyir ro*. For "cause" (*kārana-hetu*) Tibetan has *byed rgyu*, but Chinese only *yin*. For "representations" (*vijñapti*) Chinese reads merely *shih*, which is usually "*vijñāna*." For "force" (*adhipatibala*), Chinese has *tseng shang li*, while Tibetan has only *dbang*, **bala*.

87 *ad* MSg I.58 (Bh. 336c5f; bh. 168b7f; U 397a24-b4; u 266b4–267a1).

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# 10

# TIBETAN BUDDHISM AND JUNGIAN PSYCHOLOGY

*Victor Mansfield*

## Introduction

Thanks to C. G. Jung's association with the pioneer Tibetan scholar, W. Y. Evans-Wentz, Jung wrote two major essays[1] in the 1930s relating Tibetan Buddhism to his psychological ideas. He wrote, "For years, ever since it was first published, the *Bardo Thödol* has been my constant companion, and to it I owe not only many stimulating ideas and discoveries, but also many fundamental insights."[2]

Although Jung has been an important influence on me and his ideas have helped my practice of dharma, the first few pages of this chapter are critical of him. I show that he has some fundamental misunderstandings or an inability to accept the core ideas in the Buddhist texts upon which he is commenting.

After pointing out these limitations, I take a more positive stance and use a personal synchronicity example as a platform from which to discuss the convergences between Jung and Tibetan Buddhism. Synchronicity is particularly interesting because it has both philosophic and psychological connections to Tibetan Buddhism. Because readers of this volume are less likely to have a substantial background in Jungian ideas, I review them with some care. I then apply Jung's ideas to brief discussions of emptiness, the guru–disciple relationship, and deity yoga. Through this application of Jung's ideas, we can take a small step toward bringing the dharma more fully into the modern world.

## Deficiencies in Jung's understanding of the texts he discusses

The most fundamental deficiency in Jung's understanding of the texts he comments upon surfaces early in his first essay, a "Psychological Commentary on *The Tibetan Book of the Dead*" where he wrote,

> I cannot imagine a conscious mental state that does not relate to a subject, that is, to an ego. The ego may be depotentated – divested, for instance, of its awareness of the body – but so long as there is awareness of something, there must be somebody who is aware.[3]

Jung's need for "somebody who is aware" is contradicted by the text, which he says was his "constant companion." For example, in the introduction to the *Bardo Thödol*, Evans-Wentz noted:

> The whole aim of the *Bardo Thödol* teaching, as otherwise stated elsewhere, is to cause the Dreamer to awaken into Reality, freed from all the obscurations of *karmic* or *samsaric* illusions, in a supramundane or *Nirvanic* state, beyond all phenomenal paradises, heavens, hells, purgatories, or worlds of embodiment. In this way, then, it is purely Buddhistic and unlike any non-Buddhist book in the world, secular or religious.[4]

A state that is "beyond all phenomenal paradises . . . or worlds of embodiment" implies that there can be no distinguishable subject, no "somebody who is aware," who knows an object in a dualistic way. The text clarifies this point when it discusses the dawn of the primary Clear Light at death. It reads,

> Thine own consciousness [*rigpa*, pure, pristine awareness], not formed into anything, in reality void, and the intellect [*shes-rig*, consciousness revealing contents], shining and blissful, – these two, – are inseparable. The union of them is the *Dharma-Kaya* state of Perfect Enlightenment.[5]

(My inserted text in square brackets comes from the footnotes to the text quoted). In a footnote to these sentences, Evans-Wentz wrote,

> In this state, the experiencer and the thing experienced are inseparably one and the same, as, for example, the yellowness of gold cannot be separated from gold, nor saltness from salt. For the normal human intellect, this transcendental state is beyond comprehension.

From this non-duality perspective, there can be no second principle of any kind. There can be nothing outside the non-dual to which it can be opposed, no oppositions within it, and no possible limitation of it. As Evans-Wentz stated, such a non-dual state is, for the normal human intellect, "beyond comprehension," because the normally functioning human intellect must always work with oppositions. Nevertheless, non-duality is surely a pivotal aspect of the *Bardo Thödol* and Tibetan Buddhism in general. Although there are deficiencies in the Evans-Wentz translations,[6] more accurate translations[7] along with modern scholarship on Tibetan tantra[8] are clear about the non-duality at the heart of Tibetan Buddhism.

The last quotation from the *Bardo Thödol* which states that *rigpa*, or pure, pristine awareness is "in reality void" needs amplification. Emptiness or voidness is the pivot of the Tibetan Buddhist philosophic view.[9] In brief, it asserts that all subjects and objects, no matter how rarified or refined are totally empty or void of independent or inherent existence. Ultimately they are all without essence or their own identity. Yes, subjects and objects certainly have a conventional

existence and can function to bring us help and harm, but their most fundamental reality is one of deep dependency and interconnection. Thus, ultimately all phenomena are empty or void of inherent existence and only exist as a complex series of dependencies and relationships. The ultimate truth of emptiness actually allows phenomena to conventionally exist and function. In fact, emptiness itself is empty and non-dual.

Jung understood that Tibetan Buddhism is ultimately a non-dualist standpoint, but he rejected this premise. For example, in the essay "Psychological Commentary on *The Tibetan Book of the Great Liberation*" he wrote,

> There must always be somebody or something left over to experience the realization, to say "I know at-one-ment, I know there is no distinction." The very fact of the realization proves its inevitable incompleteness. One cannot know something that is not distinct from oneself. Even when I say "I know myself," an infinitesimal ego – the knowing "I" – is still distinct from "myself." In this as it were atomic ego, which is completely ignored by the essentially non-dualist standpoint of the East, there nevertheless lies hidden the whole unabolished pluralistic universe and its unconquered reality.[10]

The fundamental problem is Jung's assertion that "One cannot know something that is not distinct from oneself." This model of dualistic knowing leads him to assert that the ego, atomic or otherwise, is the knowing I, rather than a content of mind. That the ego and its structures can be known, can be objectified, demonstrates that the ego cannot be the knower. For the sake of clarity, note that when Jung uses the term consciousness he is always referring to dualistic or reflective consciousness.

Jung's inability to grant the possibility of such non-dual apprehension of reality is consistent with his view of human development, or as he calls it, individuation. Jung noted:

> Every advance in culture is, psychologically, an extension of consciousness, a coming to consciousness that can take place only through discrimination. Therefore, an advance always begins with individuation, that is to say with the individual, conscious of his isolation, cutting a new path through hitherto untrodden territory. To do this he must first return to the fundamental facts of his own being, irrespective of all authority and tradition, and allow himself to become conscious of his distinctiveness.[11]

For Jung, the endpoint and goal of human development is attaining a unique wholeness as a distinct individual. Surely, attaining psychological integration of the various forces that tear at our psyches is a precious goal, but it is not the ultimate goal of Buddhism.

The ultimate goal of Tibetan Buddhism is to be simultaneously aware of the two truths while practicing universal compassion for all sentient beings. On one hand,

the practitioner must honor the *relative truth* that individuals are finite and well-defined – the person identified in the passport. On the other hand, the *ultimate truth* of emptiness asserts that all subjects and objects are totally void or empty of independent existence or essence. Therefore, on the plane of relative truth, the enlightened Buddhist has a distinct and unique personality. She has a unique body-mind complex and historical identity. Yet, from the side of ultimate truth, she is continuously aware of her indifference from reality, her total interpenetration and nonseparable connection to reality in all its effulgence and emptiness. The practice of universal compassion naturally flows out of such wisdom. On the other hand, Jung simply did not believe that Buddhism truly offers a grander vision of human development than individuation. Although there are other limitations of Jung's understanding of Buddhism, this bias is the most important.

A related difficulty with Jung's understanding of Buddhism involves his view of the nature of reality. For example, Jung stated, "Our whole experience of reality is psychic; as a matter of fact, everything thought, felt, or perceived is a psychic image, and the world itself exists only so far as we are able to produce an image of it."[12] Since for Jung reality can come to us only in the form of images there is no possibility of formless meditations, which play such a crucial role in tantra.

Although it is important to keep these limitations of Jung in mind, I will show how Jung can actually help us gain a deeper understanding of Tibetan Buddhism. For that, I turn to a discussion of synchronicity, one of the most important and controversial topics within Jung's work. For the present chapter, synchronicity is important for two reasons. First, it has a direct connection to the Buddhist principle of emptiness. Second, it gives us a much deeper appreciation of the nature of archetypes, of special importance in understanding tantric practice.

## Synchronicity and individuation

I have discussed synchronicity in detail with many examples elsewhere.[13] Here I briefly review it and give an example. Unlike my previous discussions of synchronicity, here I focus on the role of archetypes.

Jung defines synchronicity[14] as the acausal or non-causal connection of meaning between inner psychological states and events in the outer world, the world of consensual reality (Jung 1978). For example, a man has powerful dreams on two successive nights of his long estranged alcoholic father. Both dreams surprisingly portray the father in a very favorable light. The day after the second dream, he receives a telephone call urging him to visit his dying father.

In his definition of synchronicity, Jung used causality in the conventional sense of one well-defined thing affecting another through the exchange of forces or energy. For example, I drop my pencil and the force of gravity causes it to fall to the ground, or anger causes my blood pressure to rise. As Jung said, "We must give up at the outset all explanations in terms of energy, which amounts to saying that events of this kind cannot be considered from the point of view of causality, for causality presupposes the existence of space and time in so far as all observations

are ultimately based upon bodies in motion."[15] In synchronicity neither the inner psychological state causes the outer event nor vice versa. I note in passing that Buddhism demands causes and conditions for all events so the acausality in synchronicity may seem like a conflict. However, this is not the case, since Jung defined causality much more narrowly than most Buddhists would.

Meaning is a transpersonal principle that relates to Jung's notion of individuation, of becoming a whole and unique person. Meaning is transpersonal, not something the ego creates or projects on events, although the ego seeks to discover it and implement it in daily life. Each expression of meaning, whether in a dream, a synchronicity experience, or in some moment of understanding, gives us another piece in the puzzle of who we are truly meant to be. Marie-Louis von Franz wrote:

> For Jung, individuation and realization of the meaning of life are identical – since individuation means to find one's own meaning, which is nothing other than one's own connection with the universal Meaning. This is clearly something other than what is referred to today by terms such as information, superintelligence, cosmic or universal mind – because feeling, emotion, the Whole of the person, is included. This sudden and illuminating connection that strikes us in the encounter with a synchronistic event represents, as Jung well described, a momentary unification of two psychic states: the normal state of our consciousness, which moves in a flow of discursive thought and in a process of continuous perception that creates our idea of the world called "material" and "external;" and of a profound level where the "meaning" of the Whole resides in the sphere of "absolute knowledge."[16]

According to the Jungian view, "absolute knowledge" transcends space and time, is not mediated by the senses, nor is it the empirical ego's knowledge. The realization of meaning, which touches the heart as much as the head, helps us actualize who we truly are as fully integrated, distinct individuals. This natural process of unfolding is as unique to each person as the individuality resulting from the process. All psychological experience can contribute to individuation, since it all contains purpose or a striving for some goal. Jung explained,

> When a psychological fact has to be explained, it must be remembered that psychological data necessitate a twofold point of view, namely that of *causality* and that of *finality*. . . . By finality, I mean merely the immanent psychological striving for a goal. Instead of striving for a goal, one could also say sense of purpose. All psychological phenomena have some such sense of purpose inherent in them.[17]

Since a major synchronicity is a dramatic display of meaning, it is often a significant event in the process of individuation. Despite being exquisitely tuned to our individual psychological development, the meanings express the universal

structuring patterns in the psyche, what Jung calls archetypes. The archetype is a potential for experience that cannot be reified into an independently existent entity. There are two overlapping aspects of archetypes: first, they express themselves dynamically through patterns of behavior. Here is the connection to the full range of instincts. Second, they provide the fundamental transformative meanings in our life through compelling numinous experiences, those having a mysterious power suggesting the supernatural. Once activated, all archetypes are autonomous powers not easily directed or contained. Here is a valuable definition from Jung's late writing.

> Of course this term [archetype] is not meant to denote an inherited idea, but rather an inherited mode of psychic functioning, corresponding to that inborn way according to which the chick emerges from the egg; the bird builds its nest; a certain kind of wasp stings the motor ganglion of the caterpillar; and eels find their way to the Bermudas. In other words, it is a "pattern of behavior." This aspect of the archetype is the biological one – it is the concern of scientific psychology. But the picture changes at once when looked at from the inside, that is from within the realm of the subjective psyche. Here the archetype presents itself as numinous, that is; it appears as an experience of fundamental importance. Whenever it clothes itself with adequate symbols, which is not-always the case, it takes hold of the individual in a startling way, creating a condition of "being deeply moved" the consequences of which may be immeasurable. It is for this reason that the archetype is so important for the psychology of religion. All religions and all metaphysical concepts rest upon archetypal foundations and, to the extent that we are able to explore them, we succeed in gaining at least a superficial glance behind the scenes of world history, and can lift a little the veil of mystery which hides the meaning of metaphysical ideas. For metaphysics is, as it were, a physics or physiology of the archetype, and its dogma (or teaching) formulates the knowledge of the essence of the dominants, that is, of the unconscious "leitmotivs," of the psychic happenings predominating in that epoch. The archetype is metaphysical because it transcends consciousness.[18]

Archetypes are not inherited ideas, fixed concepts, but more like universal potentials for action and meaning. They have a biological connection through the instincts that can move us in the most powerful and sometimes overwhelming ways. Jung wrote, "The archetypes have this peculiarity in common with the atomic world, which is demonstrating before our eyes, that the more deeply the investigator penetrates into the universe of microphysics the more devastating are the explosive forces he finds enchained there."[19] While the archetypes are enormous potencies, they are also primordial units of intelligence or meaning, the source and power behind all the great "isms," from Buddhism and communism to

heroism. They express themselves in our dreams, fantasies, behavior, and in worldwide myths and fairy tales.

Because of the great power of archetypes, they can easily overwhelm a person, as psychotics and those gripped by an obsessive idea demonstrate. Jung observed that, "The characteristic feature of a pathological reaction is, above all, *identification with the, archetype*. This produces a sort of inflation and possession by the emergent contents, so that they pour out in a torrent, which no therapy can stop."[20] Although Jung stressed the importance of relating to the archetypes, of appreciating the mythic, archetypal dimensions of both our inner and outer lives, he repeatedly warns of identification with these autonomous powers.

For Jung, an archetype per se is never encountered, only one embodied in a particular set of symbols, behavior, ritual, or ideology. Of course, the particular embodiment varies from one culture to the next. The divine feminine takes a unique form in Tibet that differs significantly from that of the Australian aborigines or the Catholic Church, but the deeper underlying structure or meaning is the same in all these expressions. Finally, since an archetype can express itself in both the inner and outer worlds, as in a synchronicity experience, Jung was forced to consider them as transcending the division between mind and matter. In this way, archetypes become important in understanding both psychology and physics. The following example shows how an archetype can manifest both in the inner and outer worlds.

## Seeing the Dalai Lama

Although I normally teach physics and astronomy courses, for approximately two decades, as part of Colgate University's Liberal Arts Curriculum, I have been teaching a course on Tibetan culture and history with a strong emphasis on Tibetan Buddhism. I was teaching the course in the fall of 2003 when the Dalai Lama was coming to New York City for several days of teaching and a public talk in Central Park. Since we had just read some of the Dalai Lama's writing and watched an hour-long video about him, it would be a great opportunity if the class went to his talk in Central Park. I arranged to take the class and a few students from previous classes to see him. We were to leave Colgate at 5:00 AM on Sunday, September 21, 2003.

One more piece of background information. Later that fall, I was scheduled to give a talk on my recent book, *Head and Heart: A Personal Exploration of Science and the Sacred*[21] to the Colgate Science Colloquium. Rather than hiding my interests in such things as Buddhism and Jung, which I have been doing for decades at Colgate, I planned to present a real sense of the book's contents. I was anxious about it because it all seemed so personal and easily misunderstood with me appearing like a lunatic rather than a respected scientist. Nevertheless, I decided not to give a "safe," scientifically acceptable talk, but rather divulge my deeper commitments.

Because I invariably get a significant spiritual boost from seeing the Dalai Lama, I always try to prepare myself for the occasion by paying extra attention

to my practice. I was thus deeply distressed when I awoke at 3:00 AM on the morning we were to visit him with the following dream:

> I am to give a lecture on my new book at Cornell University [where I received my PhD]. I am very concerned that the material I want to present has too much Jung and related material in it, that it will not be well received by these academic scientists, that it is inappropriate, and that I might even be met with scorn. The audience for the talk is large but the lecture will be outdoors in a place that puts me a very long distance away from the audience. I am deeply concerned that I will not be able to reach them in either a physical or psychological sense. Suddenly, I am told that the lecture will occur at another place. This new place is better because I am a little closer to the audience, but I am still very apprehensive for the same reasons. Before I am settled, about a half dozen people tell me to come with them because the lecture is actually in yet another place. They lead me to a tiny room with glass walls. I am to give the talk to this little group. My former thesis and postdoctoral advisor, Ed Salpeter, is among them. In addition to being apprehensive about the reception of the talk, I am also depressed to see how few people are interested in hearing it. I feel very exposed in this glass room and anxious about Ed being there.

This vivid dream leaves me with a terrible feeling – a very bad way to start a trip to see His Holiness. I meditate for a half an hour or so to regain my center and dissipate the unpleasant feelings. Although there are many possible forms of dream interpretation, I use Jung's approach to dreams.[22] However, I still don't know what to make of the dream nor with Ed's appearance in it. Despite my tremendous appreciation for Ed as a truly great scientist and a kind man, I was always afraid of him. Many of his former students agree with me that, despite his kindness, his brilliance is terrifying. I sent him a copy of my most recent book, since I have a story about him in there, but he never acknowledged getting the book. I guessed he thought I was so far into the lunatic fringe that he did not want to reply. I learned from meeting him in the local airport that about a year earlier his wife of 40 years just died, and he recently became involved with another woman who has a connection to Tibetan Buddhism. His presence in the little audience in the dream significantly added to my sense of dread. Is the dream just expressing my anxiety about the Colgate Science Colloquium lecture? That unconvincing interpretation tells me nothing new and thus, according to Jung's understanding of dreams,[23] implies the dream has no purpose.

At 5:00 AM, 45 sleepy students crowd into the bus. It is a five-hour bus ride to New York City so I want to make constructive use of that time. I plan to use the microphone on the bus to lead two writing exercises – after the sun is well up and I have distributed the food prepared for the trip. To use the microphone, I have to sit in the front seat, very close to the huge window that makes up the front of the bus. I notice that the bus driver has a seat belt, but none of the passenger seats has

any. In an accident, I could be flung right through that big piece of glass. Thinking about this while being surrounded on three sides by glass suddenly reminds me of my unpleasant dream of lecturing in a tiny glass room.

The second exercise I have the students do is to write down a serious question that they might have about their individuation, although I do not use that term. I tell them that many people, both Tibetan and Western, believe that just being in the Dalai Lama's presence can provoke answers to their questions, can open a door to some higher intelligence within us that can help. It is not that the Dalai Lama answers the question willfully or directly, but his presence can provoke an answer. I encourage them to stay alert for that possibility. I am not sure the students actually understand what I am saying, but it is worth a try. I do not have a question.

It is an extraordinarily beautiful day in Central Park, full of sun, mild temperatures, and 65,000 people who come to see His Holiness. We arrive there early enough to get up close. Monks are chanting, flowers are everywhere, and the huge crowd is friendly. I am so delighted with the whole thing, especially how the talk connects with the students. It is the best that I can do for them.

Much as I love students, I want to slip away from them and bask in the afterglow of the Dalai Lama's presence. Therefore, I tell them that everybody is on their own. I jokingly say, "Just get to the bus by 6:00 PM and only call my mobile phone if you are in jail or the hospital." I am in a lovely mood and want to walk in the brilliant sunshine and savor the moment. I have no agenda for nearly four hours (an unfamiliar state!) so I wander aimlessly. When I come to an intersection, I go in the first direction for which the light says, "Walk." Let nature take me where she will. Manhattan has never been so luminous.

After about a half an hour of this blissful random walk somewhere in Manhattan, I suddenly come up behind Ed Salpeter! I say, "Is that Ed Salpeter?" He turns and says, "There is the real Vic Mansfield." He explains how he saw somebody he thought was me a week earlier, pointed me out to his partner, and then found it was actually somebody else who was a graduate student in my era. Ed is on his way to Austria and has been one of the 65,000 people who saw the Dalai Lama. Apparently, his partner brought him there. I tell them how I am taking Colgate students to see the Dalai Lama. Ed warmly invites me to stop at his house whenever I am in Ithaca for a meal and conversation. I blurt out that he was in a dream of mine last night but I have no sense of the meaning of it all. I am embarrassed by my revelation.

I was in a lovely mood before seeing Ed, but after meeting him, I am in a state of deep gratitude and joy for the astonishing interconnected mystery of the universe. I do not understand what is going on, but clearly, something of importance is unfolding. I wander back into Central Park, find a grassy spot under a giant oak tree, and lay on my back staring up into the canopy.

As the students and I leave Manhattan in our bus, the traffic halts in a dense gridlock. To make constructive use of our time, I take the microphone and ask the students if they had any answers to the questions they had written down. I knew the exercise is advanced for them and do not expect much. Nobody answers. I tell

them that I am giving a talk at Colgate early in November and am apprehensive about it. I briefly tell them about the dream and the meeting with Ed. Although I do not know what is going on, this kind of experience is what I was referring to on the way down. At that very moment, a big caravan of police escorts with flashing lights and blaring sirens makes the great ocean of traffic part so that a limousine can pass our bus on its left side. It is the Dalai Lama and his entourage! The students all crowd to the left side of the bus to see the Dalai Lama gazing toward the bus out of the passenger side of his limousine. The timing is striking and I am amazed that, like a sleepwalker, I had set the stage for my experience with the writing exercise.

Still filled with wonder at it all, I settle down for a long bus ride. I fish around in my briefcase for a manuscript sent to me in mid summer by a friend. It has been getting dogged eared in my briefcase for at least six weeks, because I never seem to find time to read it. As the bus rolls northward on the beautiful evening, I am stunned to find that the paper,[24] whose reading has been delayed until this moment, discusses the physicist Wolfgang Pauli's reluctance to acknowledge his long and intimate association with Jung. Pauli also feared ridicule from his scientific colleagues because of his involvement with Jung's ideas and his critical role in helping Jung develop his synchronicity idea. I am both comforted and taken aback to learn that even Pauli, a daring titan in physics, so feared the possible scorn of his scientific colleagues that he would hide that important part of himself.

## Commentary on seeing the Dalai Lama

The greatest goal in life, according to Jung, is to actualize the unique wholeness at the core of each of us, to embark on the journey of individuation, bringing that unique seed of wholeness into full bloom. The archetype orchestrating that process, giving our lives meaning, is the self, the archetype of distinctive wholeness, where nothing is left out, from the heights to the depths of the personality.[25] Jung warned us, "The self, however, is absolutely paradoxical in that it represents in every respect thesis and antithesis, and at the same time synthesis."[26] Jung claims that the Buddha "is the most highly developed and differentiated symbol of the self."[27] Tibetan Buddhism wants us to view the guru as an expression of the Buddha, so he too is a particularly apt symbolization of the self, that principle which leads us on to the next step in our development.

Much like the phenomenon of transference in a therapeutic relationship, the disciple projects the self on the guru. Initially we cannot relate directly to our inner guru, the self, so we must find it in an outward carrier. As in any projection, we are bound to the carrier of the projection through emotional, compulsive, and primitive ways and are unable to see clearly the unique person embodying the projection. Of course, such a situation leaves the relationship vulnerable to abuse, something unfortunately seen in all religions. However, in Tibetan tantra the practice of guru yoga, devotedly meditating on the guru as the embodiment of

Buddhahood, is central. As Reginald Ray tells us, "guru yoga embodies the openness and devotion without which Vajrāyāna [tantric] practice is not possible... [it is] the very essence of Vajrāyāna practice itself."[28] In the Tibetan tradition, not only are we to understand the guru as the revered embodiment of the Buddha, we are to visualize him in our meditations and seek to become like him. This tremendous intensification of the projection draws out the archetype in its most powerful form. However, just as in the therapeutic relationship, we must eventually withdraw the projection so that we can embody the self directly.

Sogyal Rimpoche wrote,

> Who is this outer teacher? None other than the embodiment and voice and representative of our inner teacher .... He or she is nothing less than the human face of the absolute, the telephone, if you like, through which all the buddhas and all the enlightened beings can call you.[29]

Our task is to integrate this "telephone," convert it to a mobile phone that is always with us so that we can call at any time on the absolute in the form of our inner truth. Alternatively, in Jungian language we seek to build a living and dynamic relationship between the ego and the self.

My root guru died two decades ago and nobody can take his place. Nevertheless, the Dalai Lama plays the role of a guru who, although not involved directly in my daily practice, plays a central role in my inner life. The synchronicity experience just described was saturated with the presence of the Dalai Lama, the carrier of the self and the apparent catalyst for the experience.

Turning more directly to the synchronicity experience, there clearly was no causal relationship between my dream with Ed and my meeting him the next day in Manhattan. I had the intuition that there was a meaningful connection between those events, but the meaning, as in most synchronicity examples, was not obvious. Just as in a powerful dream, we might have the strong sense that it is meaningful without being able to articulate the meaning. This occurs, according to Jung, because the unconscious has a compensatory or complementing relationship to the ego.[30] The meaning seeks to compensate for a one-sided or inappropriate attitude of the ego. Since the goal of the meaning is to transform the ego, to compensate for its blind spots, it is difficult for the ego to grasp the meaning directly. Since we are likely to impose inappropriate and premature explanations, it is best to savor such experiences, to feel our way into them and only later try to elicit their meaning, to tease out their intentionality or purpose.

For the Colgate Science Colloquium, I had planned to give a talk about the complementary relationship between science and the world of feeling and meaning. That is already far from the usual science talk in that series. However, the real tension came from my decision to embed the discussion within a personal synchronicity experience that directly relates to the complementarity of science and meaning.[31] (Obviously, I am also taking a similar approach here, through using a different synchronicity example.) Despite having always hidden my

spiritual and psychological interests, I wrote openly about them in my recent book, so why not be more fully me at this Science Colloquium? Of course, I feared being misunderstood, ridiculed, or written off as harebrained, as a person with modest scientific talent who went astray. Despite all this ambivalence, my sense of integrity demanded a representative and honest talk.

In reflecting on the experience I keep coming back to Ed's uncanny statement, "This is the real Vic Mansfield." On one hand, it seems like a natural thing to say, given that he had recently confused me with somebody else. On the other, given my inner conflict, the dream, and the state I was in just after seeing the Dalai Lama; it was extraordinary. Here is my most revered science teacher telling me that this fellow floating in a sea of bliss and devotion was the real Vic Mansfield.

I now believe that the entire experience was trying to force me into a greater acceptance of the mystical, nonscientific part of me, to embody a wholeness that more completely represents my true psychological totality. For decades, the scientist has struggled with the lover of dharma. Who shall rule, the scientist or the devotee, the head or the heart? Can I even imagine harmony between them? My struggle and the resistance to the required synthesis is so old and deep that it seems to require a synchronicity experience, given more force by involving Ed and, indirectly, Wolfgang Pauli. Perhaps I cannot run from my potential wholeness anymore. Yes, I can still be devoted to science, but the lover of dharma, Jung, and the inner world demands acknowledgment and seeks to be embraced as an important part of the whole.

Let us return to the two aspects of the archetype: the dynamic or instinctual side and the cognitive or meaning side. The dynamic side of the self seems expressed in my commitment to present a more complete picture of my interests at the Science Colloquium and my unconsciously setting up the synchronicity experience through my student writing exercise. The meaning side of the archetype expresses itself more directly in the synchronicity experience. The self, demanding my unique wholeness, incarnated in both my inner state and the outer world. It incarnated in the dream with its fear of showing my deepest commitments, with Ed's presence in the dream intensifying my fears. In the outer world, Ed, the paragon of science, surprisingly tells me the next day that the real Vic Mansfield is the one devoted to the Dalai Lama and the state of mind he induces.

As Jung says, "Acceptance of oneself is the essence of the moral problem and the acid test of one's whole outlook on life . . . to accept himself in all his wretchedness is the hardest of tasks, and one which it is almost impossible to fulfill. The very thought can make us sweat with fear" (Jung 1969: 339).[32]

Although relating to the self – the archetype of wholeness and meaning – is of the utmost importance, it has its dangers. For example, Jung warned, "The great psychic danger, which is always connected with individuation, or the development of the self, lies in the identification of ego-consciousness with the self. This produces an inflation which threatens consciousness with dissolution."[33] What is more, "An inflated consciousness is always ego centric and conscious of nothing but its own existence. It is incapable of learning . . . hypnotized by itself and therefore

cannot be argued with."[34] On that sobering note, I turn to an important philosophic implication of synchronicity.

From a Buddhist philosophic perspective, a synchronicity experience offers a striking expression of emptiness, of deep dependency and interconnectedness between ourselves and the world. Our natural and habitual tendency is to project independent existence or inherent existence on the empty flux of experience. We falsely believe that our world and our own identity are both independently existent. Such projections are the foundation upon which we flee from some objects and persons or overvalue others. This projection of inherent existence binds us to pleasure and pain – the wheel of suffering. Our inability to see that at all levels our own personality has only a conventional existence and is ultimately a complex net of relationships prevents us from directly knowing the wisdom of emptiness and practicing compassion.

In a synchronicity experience, the deep interconnections and relatedness of the inner and outer world empirically express emptiness. Synchronicity experiences are so arresting because they violate our naïve sense of the independent existence of our ego and its world. Perhaps the greatest gift from a synchronicity is not the psychological meaning that might be ferreted out of the experience but the striking expression of emptiness.

Finally, I acknowledge that anecdotal evidence, such as the above synchronicity experience, is weak from a scientific point of view. Nevertheless, synchronicity experiences dramatically present interesting scientific, psychological, and philosophic challenges. As I have discussed in detail elsewhere,[35] I do not believe that such experience are easily subjectable to traditional scientific investigation. However, that need not deter us from a serious consideration of it.

## Archetypes in tantra

From both Tibetan sources and reports of near-death experiences, the visions seen in the after-death state are overpoweringly real, not of our making. For example, Sogyal Rinpoche stated,

> This is a vision that fills the whole of your perception with such intensity that if you are unable to recognize it for what it is, it appears terrifying and threatening. Sheer fear and blind panic can consume you, and you faint.[36]

On the other hand, the *Bardo Thödol* tells us that we are not to fear these visions because they are products of our own mind. For example, the text reads:

> Oh nobly-born, all those are the radiances of thine own intellectual faculties come to shine. They have not come from any other place. Be not attracted towards them; be not weak; be not terrified; but abide in the mood of non-thought-formation. In that state all the forms and radiances will merge into thyself, and Buddhahood will be obtained.[37]

How can we understand this seeming contradiction? If they are just a product of the dying individual's mind, "radiances of thine own intellectual faculties," what is it that gives them such extraordinarily compelling and apparently objective nature? Why are the wrathful or peaceful deities so difficult to dismiss if they are merely subjective? Jung suggests that the visions seen in the after-death states, are projections of archetypes, which accounts both for their overwhelming power and seeming objectivity.[38] Although they are subjective projections, they are expressing the objectivity and power of the archetypes, the fundamental potentials for experience. Yes, they are personal projections, yet they express the reality and numinosity of archetypes.

If indeed these visions of both peaceful and wrathful deities, whether after-death or in deity visualization practices, are archetypal projections then their particular form or symbolization is not universal. In other words, these same archetypal energies can be symbolized differently depending upon the practitioner's culture. In fact, the archetype may be even more accessible if symbolized by images taken from the practitioner's own culture. This may offend those who believe that the details of the deity visualization that they have worked so hard to stabilize are as important as the underlying archetype. However, Sogyal Rinpoche tells us:

> I am often asked: "Will the deities appear to a Western person? And if so, will it be in familiar, Western forms?"
>
> The manifestations of the bardo of dharmatā are called "spontaneously present." This means that they are inherent and unconditioned, and exist in us all. Their arising is not dependent on any spiritual realization we may have; only the recognition of them is. They are not unique to Tibetans; they are a universal and fundamental experience, but the way they are perceived depends on our conditioning. Since they are by nature limitless, they have the freedom then to manifest in any form.
>
> Therefore, the deities can take on forms we are most familiar with in our lives. For example, for Christian practitioners, the deities might take the form of Christ or the Virgin Mary. Generally, the whole purpose of the enlightened manifestation of the buddhas is to help us, so they may take on whatever form is most appropriate and beneficial for us. But in whatever form the deities appear, it is important to recognize that there is definitely no difference whatsoever in their fundamental nature.[39]

Although Sogyal does not use the word archetype, he clearly understands that the deities in *yidam* visualization practice and the experiences of the Bardo are archetypal projections, just as Jung claims.

In deity yoga, the practitioner tries to make a total identification with the deity. For example, the present Dalai Lama writes:

> For example, a main tantric technique is the cultivation of a subtle divine pride, a confidence that one is an enlightened tantric deity, the Lord of

> the Maṇḍala. One's mind is the Wisdom Body of a Buddha, one's speech is the Beatific Body, one's form is the Perfect Emanation Body, and the world and its inhabitants are seen as a maṇḍala inhabited by the various forms of tantric deities.[40]

This practice, involving body, speech, and mind in both the inner and outer worlds certainly flies in the face of Jung's injunction about not identifying with an archetype. However, Tibetan tantra is well aware of the dangers and prepares a tantric practitioner through immersion in emptiness, compassion, and renunciation. The Dalai Lama has stressed that "Every sādhana begins with, is structured around, and ends with meditation on emptiness."[41] Deity practice cannot be done without such safeguards and an intimate relationship with a fully qualified tantric master. The Dalai Lama has also said:

> Thus, we have to utterly change our sense of I. To do so involves the subject of emptiness. To practice the yoga of divine pride without an understanding of emptiness will not only be useless, but could lead to identity problems and other undesirable psychological effects. Therefore, it is said that although the Vajrayāna is a quick path when correctly practiced on the proper spiritual basis, it is dangerous for the spiritually immature. This type of danger area is one of the reasons why the Vajrayāna must be practiced under the supervision of a qualified vajra ācārya.[42]

Jung and tantra differ drastically in their advice on how to relate to these archetypal potencies. However, they agree on the great power of these archetypes and tantra carefully girds its practitioners with ongoing grounding in emptiness, compassion, and renunciation.

Assuming that the archetypes are indeed being projected into imaginal forms both in the Bardo and in deity visualization, then the exact form of the deity is secondary to what it represents. Therefore, tantric practices, methods, and ideas can be symbolized in ways that make them culturally more accessible to non-Tibetans. Although this is true in principle, we cannot merely pluck pieces of tantra out of its cultural context and network of safeguards without losing both their integrity and the efficacy of the whole. It is important to bring the dharma into the modern world, but not in a corrupt or dangerous form.

## Summary and conclusions

Although understandably Jung clearly had serious limitations in his understanding or appreciation of some core aspects of Tibetan Buddhism, he also resonated very strongly with some of its central ideas. He too appreciated the centrality of mind and how skillful employment of the imaginative capacity of mind can transform the mind. Of course, Jungians do not suggest deity practice, but they do encourage

the use of what Jung called active imagination,[43] a technique for directly addressing the archetypal powers. Of course, Jung encouraged a respectful meditation on the archetypal images that come up in dreams and visions. Especially in the context of modern culture, so saturated in scientific materialism, Jung and the Tibetans share a deep reverence for the potency of image and imagination. Of course, the images per se are not the goal in either Tibetan Buddhism or Jung. The goal is to contact the autonomous intelligences, the archetypes, whether clothed in symbols from Tibet or ancient Greece.

Although many people are attracted to the idea of synchronicity and its display of archetypal meaning, I know from personal experience that many scientists dismiss or condemn it. Nevertheless, a personal experience of synchronicity can provide a vivid expression of the truth of emptiness, the philosophic heart of Tibetan Buddhism. If through such experience more meaning incarnates and furthers our individuation, then we are doubly blessed.

Archetypes are at the core of Jung's work and despite the misunderstandings that often surround them, they provide a modern way of appreciating such seemingly exotic practices as guru yoga and deity practice. Having had the privilege of introducing hundreds of bright, highly motivated, but non-Buddhist, students to Tibetan Buddhism, I know how foreign these ideas seem to them. If through an appreciation of Jung's ideas we can articulate this great tradition in modern and more easily understood ways, shorn of its exoticism, yet true to its source, then we have served both the dharma and the future generations seeking to understand it.

## Acknowledgments

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# Part II

# MENTAL AFFLICTIONS

## Their arising and deconstruction

# 11

# MINDFULNESS IN THE PĀLI *NIKĀYAS*

*Ven. Anālayo*

Mindfulness is a quality of cardinal importance in all Buddhist traditions. A closer look at the Pāli *Nikāyas* can reveal a number of useful perspectives related to this quality, helping us to better appreciate and understand its practical implications. In order to cover the different perspectives on mindfulness found in the Pāli discourses, the present chapter will proceed by considering mindfulness in relation to breadth of mind, to the process of perception, to the practice of *satipaṭṭhāna*, to receptivity, to wisdom and to concentration. To begin with, let us take a look at the Pāli word for mindfulness and its connotations.

'Mindfulness' and 'awareness' are the most common ways of translating the Pāli term *sati*, or its Sanskrit equivalent *smṛti*. The word *sati* is closely related to the verb *sarati*, 'to remember'. This relation of *sati* to memory recurs in its formal definition in the Pāli discourses, which reads: 'he is mindful, being endowed with highest discriminative mindfulness (so that) things said or done long ago are recalled and remembered.'[1] The close relation of mindfulness to memory can moreover be seen in the person of *Ānanda*, the monk disciple who acted as the personal attendant of the Buddha. According to a discourse listing the outstanding qualities of various disciples, *Ānanda* was exceptional for his mindfulness (AN.1.24). The same *Ānanda*, according to the account given in the Pāli *Vinaya*, accomplished the almost incredible feat of remembering all the discourses spoken by the Buddha and thereby preserving them for posterity (Vin.2.287).

At first sight, this memory connotation of mindfulness is a little puzzling, since to practise mindfulness meditation means to stay in the present moment and thereby to avoid dwelling on memories from the past. This apparent contradiction can be resolved by a closer inspection of the above definition of *sati*, which brings to light that the Pāli discourses do not really equate mindfulness with memory, but rather indicate that once mindfulness is present, memory will be able to function well.

One aspect of this relation of mindfulness to memory is that in order to be able to remember a particular situation, mindfulness needs to be present at the moment when such a situation actually takes place. Only if mindfulness is present will it be possible to clearly take in whatever happens, and only what has been clearly taken in and comprehended by the mind can later be remembered. To clearly take

in and comprehend what is happening requires a certain breadth of mind, a requirement that leads us to examining a characteristic quality of mindfulness.

## Mindfulness and breadth of mind

Breadth of mind is a central requirement for memory since the broad angle perspective of such breadth of mind enables taking in a maximum amount of information. Due to such breadth of mind one becomes aware of various elements and facets of a particular situation, thereby enhancing the clarity and perceptual depth of what is experienced. Taking in such a maximum amount of information supports relating the event to be remembered in various ways to the network of information already stored in our mind. The better a particular piece of information is linked up with other information in our mind, the easier it will be to access this particular information on a later occasion.

A complementary aspect of the relation of mindfulness to memory is that mindfulness is not only required at the moment when the event to be remembered takes place, but also at the moment when this event has to be remembered. The presence of mindfulness while remembering again requires breadth of mind. It is this breadth that enables the mind to make the necessary connections between the present moment and the information to be remembered.

This need for breadth of mind when remembering becomes evident on those occasions when we try to recall a particular piece of information but, the more we apply our mind, the less we are able to remember it. If, however, we lay the issue in question aside for a while, permitting the mind to return to a natural state of relaxed receptivity, the information we were trying to remember will suddenly spring to mind. The narrow focus of the mind while trying to force ourselves to remember actually had prevented the recall of the information. But once our mind became more relaxed and open, we were able to access the required information almost effortlessly.

Hence the relation of mindfulness to memory, highlighted in the standard definition of mindfulness in the Pāli discourses, indicates that both share the same mental quality of breadth of mind, a state of mind that is broad, open and receptive. This suggestion finds confirmation in some Pāli discourses, which explicitly relate the absence of mindfulness to a "narrow" state of mind. According to them, the presence of mindfulness results in a 'broad' and even 'boundless' state of mind.[2]

This close relation of mindfulness to breadth of mind comes up in several similes employed in the Pāli discourses. Examining the imagery contained in such similes from the Pāli *Nikāyas* can give us a more vivid picture of the implications of mindfulness as it was understood in ancient India.

One of these similes describes a cowherd who had to closely watch over his cows to prevent them from straying into the fields where the crop had ripened. Once the crop was harvested, he was able to relax, sit under a tree and watch over them from a distance. When describing this comparatively relaxed and distant manner of observation, this simile speaks of him just 'being mindful'

of the cows.[3] The attitude suggested by this simile is a calm and detached type of observation, a literally broad state of mind that watches over the whole of the situation.

Another simile supporting this quality of overseeing a situation from a detached position occurs in a verse, which compares the practice of mindfulness to climbing onto an elevated platform or tower (Th 765). This tower simile vividly brings out the ability to oversee a whole situation and thereby be aware of its various aspects. According to this simile, to oversee the situation as a whole requires climbing onto the tower and thereby establishing some distance between what is to be observed and the observer. The same applies to the development of mindfulness, which by creating an inner distance of detachment in regard to the situation at hand makes it possible to oversee what is taking place. This distance, it needs to be said, is not the distance of one who is caught up in the head and out of touch with what happens, but refers to the affective distance of not being emotionally overwhelmed by the situation.

The ability to oversee a situation recurs in yet another simile, which compares mindfulness to a careful charioteer (SN.5.6). The qualities evoked by this image are careful and balanced supervision, an ability required for steering safely through traffic in ancient India as much as in the modern world.

This quality of balanced supervision inherent in mindfulness can also be seen in its role among the faculties, a set of mental qualities of particular relevance for progress on the path to liberation. These faculties are confidence, energy, mindfulness, concentration and wisdom.[4] These five faculties need to be carefully balanced with each other in order to ensure smooth progress on the path. Confidence needs to be balanced with wisdom, just as energy needs to be balanced with the mental calm gained through concentration. Excessive development of any of these, to the detriment of its complementary quality, will lead to a lopsided development and eventually result in stagnation.

Among these five faculties, mindfulness stands quite literally in the middle position. This middle position represents the task of mindfulness to balance and monitor the other four faculties, by becoming aware of excesses or deficiencies. Mindfulness is moreover the one out of these faculties that will never be in excess, being a mental quality whose development is recommendable in all situations and at all times.[5]

The monitoring position of mindfulness among these five faculties and the similes comparing it to a careful charioteer, to climbing upon a tower and to a relaxed cowherd, support the notion of breadth of mind as a central quality of mindfulness, a quality already inherent in its close relation to memory.

## Mindfulness and the process of perception

Mindfulness as a mental quality has much in common with attention (*manasikāra*), a basic mental function present in any kind of mental state.[6] This basic faculty of ordinary attention characterises the initial split seconds of barely cognising an

object, before one begins to recognise, identify and conceptualize. Mindfulness can be understood as a further development and temporal extension of this type of attention, adding clarity and depth to the usually much too short fraction of time occupied by bare attention in the perceptual process. By developing such bare mindfulness it becomes possible to see things just as they are, unadulterated by the influence of mental projections and evaluations.

In order to appreciate the implications of such bare mindfulness, we need to turn to the early Buddhist analysis of perception. The Pāli discourses repeatedly explain that consciousness, representative of perceptual experience, arises in dependence on the senses and their objects, such as the eyes and forms, the ears and sounds, etc (e.g. MN.1.111). The explicit reference here to the senses as one of two determining factors has deeper implications. This conditioning influence of the senses on experience hints at the fact that in addition to the data provided by the sense-objects, the subjective input provided by ourselves plays an important role in how we perceive and experience the world.

This subjective input is, to a great extent, an outcome of previous experiences and personal inclinations. These can manifest in a semi-conscious or even unconscious biasing of the experienced data. According to early Buddhist psychology, a central operating mechanism behind such unconscious projections are the so-called latent tendencies (*anusaya*). These latent tendencies are part of the basic build up of ordinary human beings, being already present in newborn babies (MN.1.432).

The Pāli discourses present a set of altogether seven such latent tendencies, of which the first two are of particular relevance for the present discussion: the latent tendency to sensual desire and to irritation.[7] These two latent tendencies tend to be triggered off by pleasant or unpleasant experiences, resulting in evaluations and projections under the influence of desire and irritation (MN.1.303).

The main problem with these latent tendencies is that they operate without conscious deliberation on our part. Therefore the central task is to become aware of their influence. The tool for this is bare mindfulness, in the sense of simply remaining aware at the moment of a pleasant or unpleasant experience, thereby bringing the driving force of these underlying tendencies into conscious awareness. In this way the selective and filtering mechanisms of perception can be uncovered, thereby highlighting the extent to which subjective experience mirrors our own unconscious evaluations and projections. Through sustained development of mindfulness, the 'tendency' of pleasant or unpleasant experiences to result in projections under the influence of desire and aversion can gradually be overcome.

According to the Pāli discourses, such meditative training through mindfulness can lead to a stage where one is able to experience phenomena at will as agreeable or as disagreeable.[8] The culmination of this process of meditative training comes when one transcends such evaluations completely and becomes firmly established in perceptual equanimity. The Pāli discourses speak of such mastery

over one's perceptions as something superior even to supernatural powers like walking on water or flying in the air (DN.3.112).

To develop such bare mindfulness stands in close relation to the practice of 'restraint at the sense doors'.[9] Restraint at the sense doors is an aspect of the gradual path of meditative training during which the practitioner retains bare mindfulness in regard to any sense-input, thereby avoiding to get carried away by associations and reactions to what is experienced. Such cultivation of mindfulness at the sense-doors does however not imply that one should simply avoid sense impressions. As the Buddha pointed out, if simply avoiding to see or to hear were conducive to realization, blind and deaf people would be accomplished practitioners (MN.3.298). Instead, the simple presence of undisrupted and bare mindfulness curbs the mind's tendency to amplify and proliferate the information received.

A simile in the Pāli discourses illustrates this with by comparing mindfulness to a town's gatekeeper (AN.4.110). The task of such gatekeepers in ancient India was to make sure that only genuine citizens of the town were allowed to enter the gates. For this purpose, such a gatekeeper had to be familiar with the citizens and had to remain awake and aware while being on duty at the city gate. Just as a good gatekeeper will quickly recognize those who are not entitled to enter the town, so too the presence of well-established mindfulness enables quick recognition of the arising of unwholesome and detrimental associations and reactions at the sense doors.

The outstanding potential of such bare mindfulness in regard to perceptual experience can best be illustrated with the case history of Bāhiya, a renunciate wanderer in ancient India. This wanderer Bāhiya had heard of the Buddha teaching the path to awakening. To receive instructions, Bāhiya walked across half of the Indian subcontinent to the place where the Buddha was living. On his arrival he found that the Buddha had gone into town to beg his daily alms, so he went into town to search for the Buddha. Meeting the Buddha out on the roads begging, Bāhiya requested and received a short and cryptic instruction, which resulted in him gaining full awakening right there and then, out on the roads of the city.

The instruction given by the Buddha was:

> When, for you, in what is seen will be only what is seen, in what is heard only what is heard, in what is sensed only what is sensed, in what is known only what is known, then you will not be by that. When you are not by that, then you will not be therein. When you are not therein, then you will be neither here, nor there, nor in between. This itself is the end of *dukkha*.[10]

This cryptic instruction points to maintaining bare mindfulness at any sense door, simply registering whatever happens. Mindful in this way, one will not be carried away 'by that', namely by the conditioning force of latent tendencies and mental

defilements. Not being carried away by these, one will not be established 'therein' in the sense of not identifying with what is happening. By avoiding identification with what is happening, the path to freedom begins to unfold, an unfolding which goes beyond being established or attached at all, whether 'here' or 'there' or 'in between', and thereby goes beyond all *dukkha*.

Whereas in the case of Bāhiya the Buddha's instruction on bare mindfulness led to an instantaneous awakening, in the case of most human beings the same requires a more gradual and sustained process of practice. One discourse illustrates the gradual nature of this process with the example of taming a wild elephant (MN.3.136). Just as a recently caught wild elephant has to gradually be weaned of his forest habits, so too sustained practice of mindfulness will gradually wean the mind from worldliness and perceptual distraction.

For such gradual and sustained development of mindfulness, awareness directed to the body is an especially important tool. Once we have learned to be mindful of the body, to be quite literally 'with' the body during its activities instead of getting carried away by perceptions and thoughts, we are mentally anchored in the body. Being mentally anchored in the body in this way we are quite literally 'centred', and thereby able to stir through the vicissitudes of daily life without loosing our mental balance.

This aspect of mindfulness of the body finds a vivid illustration in another simile from the Pāli discourses. This simile depicts a man carrying a bowl full to the brim with oil on his head through a crowd watching a beautiful girl singing and dancing (SN.5.170). Another man with a drawn sword follows him, ready to cut off his head if even one drop of the oil should be spilled. To preserve his life, the man carrying the oil has to apply his full attention to each step and movement, without allowing the commotion around the girl to distract him. The careful and circumspect behaviour of the man carrying the oil on his head highlights the restraining effect of mindfulness of the body in relation to perceptual distraction. The image of carrying an object on the head exemplifies moreover the balance and centeredness accompanying bodily activities when they are carried out with mindfulness.

Another simile compares mindfulness of the body to a strong post, to which six different wild animals are bound (SN.4.198). Since the animals are firmly bound to the post, however much they may struggle to escape, sooner or later they have to give up and lie down. In a similar way mindfulness of the body can become a strong post in regard to whatever distractions arise at the senses. Lacking such grounding or anchoring through body awareness, desire and aversion easily find an opportunity to arise.

The similes of the strong post and of the man carrying a bowl of oil illustrate how mindfulness of the body can provide a mental anchor against perceptual distraction. The same protective power of mindfulness also underlies the simile of the gatekeeper. Such bare mindfulness of the whole range of perceptual experience can even result in instantaneous awakening, as in the case of the wanderer Bāhiya.

These similes and the story of Bāhiya highlight the importance of bare mindfulness as a central tool for countering and finally transcending perceptual distraction.

## Satipaṭṭhāna

The development of body awareness, illustrated in the similes of the strong post and of the man carrying a bowl of oil on his head, forms part of the development of mindfulness as *satipaṭṭhāna*, a central factor of the noble eightfold path to liberation.

Within this noble eightfold path, mindfulness occupies the middle position in the three factored path-section directly concerned with mental training, which consists of right effort, right mindfulness and right concentration. Mindfulness also occupies the middle position between the two mental qualities of energy and concentration in the above-mentioned enumeration of the five faculties. This energy–mindfulness–concentration sequence to some extent mirrors a natural progression in the development of mindfulness, where the early stages of practice require a considerable degree of energy to counter distraction. Once these distractions are kept at bay through sustained mindfulness, meditation practice becomes increasingly effortless, a process which in turn leads to an increasingly concentrated and calm state of mind.

To develop mindfulness as a factor of the noble eightfold path means to develop the four *satipaṭṭhāna*. Before turning to the practical implications of these four, the term *satipaṭṭhāna* itself requires a short examination.

The most common translation of *satipaṭṭhāna* is 'foundation of mindfulness'. This translation is based on an explanation found in the Pāli commentaries, which derives the word *satipaṭṭhāna* from *sati* and the term *paṭṭhāna*, meaning 'foundation' or 'cause' (Vism.678). With this commentarial explanation, *satipaṭṭhāna* becomes a 'foundation of mindfulness', with *paṭṭhāna* understood to refer to what 'causes' the establishment of mindfulness, namely its objects.

A problem with this presentation is that it tends to move emphasis from the attitude of being mindful to the objects for being mindful. This shift of emphasis is unfortunate, since it can easily lead to mistaking the means for the end. Yet, what really matters is the mental attitude inculcated through mindfulness practice, not its objects.

From a grammatical viewpoint, the explanation found in the Pāli commentaries is not convincing, since the usual pattern for the forming of Pāli compounds would require the beginning consonant of the term *paṭṭhāna* to be doubled. Thus the resulting term would be *satippaṭṭhāna*, with a double *p*, instead of *satipaṭṭhāna*. Another argument against the commentarial explanation is that the term *paṭṭhāna* does not occur at all in the early Pāli discourses, but comes into use only in the historically later *Abhidhamma* and the commentaries. The complete absence of the term *paṭṭhāna* from the early texts makes it highly

improbable that this word should have been used for the formation of the compound *satipaṭṭhāna*.

In contrast, the discourses frequently relate mindfulness to the verb *upaṭṭhahati*, indicating that *upaṭṭhāna* would be the etymologically correct derivation. The same finds corroboration in the corresponding Sanskrit term *smṛtyupasthāna*, which confirms that *upasthāna*, or its Pāli equivalent *upaṭṭhāna*, is the correct choice for the compound. To derive *satipaṭṭhāna* from *sati* and *upaṭṭhāna* is also grammatically correct, since according to the rules for compound formation either the last letter *i* of *sati* or the first letter *u* of *upaṭṭhāna* would have to be dropped, so that the word *satipaṭṭhāna* would indeed be a possible result of combining *sati* with *upaṭṭhāna*.

This word *upaṭṭhāna* stands for 'placing near' or 'being present', and as part of the compound *satipaṭṭhāna* points to a particular way of being present and attending to something with mindfulness. Based on this derivation, the compound *satipaṭṭhāna* indicates that mindfulness is 'present', in the sense of attending to the current situation. The word *satipaṭṭhāna* can then be translated as 'presence of mindfulness' or as 'attending with mindfulness'.

After this short philological examination, time has come to take a closer look at the four *satipaṭṭhānas*. A detailed exposition of these four *satipaṭṭhānas* can be found in the *Satipaṭṭhāna Sutta*, the chief discourse in the Pāli *Nikāyas* for instructions on the practice of mindfulness (MN.1.55–63). This discourse directs mindfulness to the body, feelings, mind and *dhammas* (see diagram on next page). This fourfold presentation forms the paradigm for the practice of mindfulness in the Pāli *Nikāyas*.

The Pāli commentaries explain the rationale behind this fourfold presentation to be related to different character types found among meditators (Ps.1.239). According to them, mindfulness of the body and of feelings recommend themselves as the main field of practice for meditators who tend more towards craving, while mindfulness of the mind or of *dhammas* are appropriate for meditators more prone to intellectual speculation. In each of these two cases, those whose character is to think and react quickly can profitably centre their practice on the relatively subtler practice of mindfulness of feelings or else of *dhammas*, while those whose mental faculties are more circumspect and measured will have better results if they base their mindfulness practice on the grosser objects of the body or else of the mind.

The same Pāli commentaries also set the four *satipaṭṭhānas* in opposition to four perceptual 'distortions' (*vipallāsas*). These four distortions are to mistake what is unattractive, unsatisfactory, impermanent and not self, for being attractive, satisfactory, permanent and a substantial self. According to the commentarial explanation, mindfulness of the body reveals the absence of bodily beauty; mindfulness of feelings counters the search for satisfaction in fleeting pleasures; mindfulness of states of mind discloses the impermanent nature of all experience; and mindfulness of *dhammas* reveals that the notion of a substantial and permanent self is nothing but an illusion.

The next body mindfulness exercise turns to the anatomical constitution of the body, exemplified in the *Satipaṭṭhāna Sutta* by listing various bodily parts such as

In the final analysis, however, all four *satipaṭṭhānas* partake of the same essence. As the Pāli commentaries explain, each of them is capable of leading to realisation, comparable to different gateways leading to the same city.

The range of the first of these four *satipaṭṭhānas*, which directs awareness to the body, proceeds from mindfulness of breathing, of postures and of various activities, via an analysis of the body into its anatomical parts and its basic elements, to contemplating a corpse in decay.

The first of these, mindfulness of breathing, constitutes a convenient way of building up a basis in mental calm and concentration. Mindfulness of breathing also has a considerable potential as a tool for the development of insight, since the impermanent nature of the breath serves as a constant reminder of the impermanent nature of our bodily existence, which is so dependent on the next breath to be taken in.

The next exercise for mindfulness of the body deals with the four postures, which are walking, standing, sitting and lying down. This mindfulness practice aims in particular at the development of general body awareness, thereby countering the mind's tendency to distraction and serving as an important foundation for more formal siting meditation. The third exercise, mindfulness and clear comprehension of bodily activities, extends awareness of the body to particular activities such as eating, drinking, wearing one's clothes and obeying to the calls of nature.

The four *satipaṭṭhānas*:

1. BODY
a) breathing
b) postures
c) activities
d) anatomical parts
e) elements
f) corpse

2. FEELINGS
a) pleasant/painful/neutral
b) worldly/unworldly

3. MIND
a) lust/anger/delusion/distraction
b) great/unsurpassable/concentrated/liberated

4. *DHAMMAS*
a) hindrances
b) aggregates
c) sense-spheres
d) awakening factors
e) noble truths

hair, skin, bones etc. This exercise can act as an antidote to vanity and sensual desire. The first anatomical parts mentioned in this list are usually taught to Theravāda monks and nuns on their day of ordination, no doubt as an encouragement to embark on this particular exercise as a protective and supportive practice for a celibate life style.

Next comes mindfulness of the body in terms of the four elements, which are earth, water, fire and air. These four elements stand representative for solidity, cohesion, temperature and motion as basic qualities of inanimate matter. This exercise can lead to deep insight into the selfless and empty nature of the body, which is but a combination of these four elements or qualities and thereby not at all different from any other manifestation of these four elements found outside in nature.

The list of mindfulness exercises concerned with the body concludes with the cemetery contemplations, which direct awareness to different stages of a dead and decaying body. In ancient India, corpses were at times left out in the open in charnel grounds, where they either decayed or were devoured by wild animals. Monks or nuns would visit such charnel grounds in order to develop this particular meditation practice. Similar to mindfulness of the anatomical parts of the body, this exercise can act as an antidote to vanity and sensual desire. It moreover quite vividly exposes the impermanent nature of the body, whose final destination is none other than death.

The second of the four *satipaṭṭhānas* is mindfulness of feelings. The instructions found in the *Satipaṭṭhāna Sutta* direct mindfulness to the affective quality of feelings, distinguishing them into pleasant, painful and neutral types. Here the meditator's task is to be aware of the affective input provided by feeling, an affective input which easily leads to reactions, projections and mental elaborations in regard to what has been experienced.

These three types of feelings should moreover be differentiated into 'worldly' and 'unworldly' occurrences. This aspect of mindfulness of feelings directs awareness to the difference between worldly feelings caused by sensual experiences and unworldly feelings related to renunciation and spiritual practice. The rationale for this distinction is to draw attention to the relation of worldly feelings to the arising of desire and aversion, and to the function of unworldly feelings of spiritual joy and renunciation as means for progress on the path.

The third of the four *satipaṭṭhānas* turns to the mind, directing awareness to the presence or absence of unwholesome states of mind such as lust, anger, delusion and distraction or contraction. The main task here is to clearly recognize the state of mind underlying a particular train of thought, instead of being carried away by the thought. In this way the motivating forces at work in our mind can be uncovered and insight into the mechanisms of the mind becomes possible. The same *satipaṭṭhāna* exercise also covers the presence or absence of higher states of mind experienced during more advanced stages of tranquillity or insight meditation, when the mind becomes 'great', 'unsurpassable', 'concentrated' or 'liberated'.

The fourth *satipaṭṭhāna* is concerned with *dhammas*. Before describing its actual practice, a short examination of the implications of the word *dhamma* is required, a word which can have a wide range of different meanings.

In the present context, the most frequent translation of *dhammas* is as 'mental objects'. Mental objects in the sense of whatever can become an object of the mind, instead of being an object of the five other senses (eye, ear, nose, tongue and body). In relation to the fourth *satipaṭṭhāna*, this rendering is less convincing. The *dhammas* listed under the fourth *satipaṭṭhāna* are the hindrances, the aggregates, the sense-spheres, the awakening factors and the four noble truths. These *dhammas* do not naturally evoke the classification 'mental objects'. In fact, if the term *dhammas* were to refer to objects of the mind, then what comes under the other three *satipaṭṭhānas* should also be included here, since these too can become objects of the mind. Moreover, one of the exercises listed under the

fourth *satipaṭṭhāna* is mindfulness of all six senses together with their respective objects, so that in this case mindfulness of *dhammas* is not confined to the objects of the sixth sense only.

What the fourth *satipaṭṭhāna* actually deals with are not 'mental objects' but specific mental qualities (such as the hindrances and the awakening factors) and analyses of experience into specific categories (such as the aggregates, the sense-spheres and the four noble truths). These mental factors and categories constitute central aspects of the Buddha's way of teaching the *Dhamma*.

The problem of translating *dhammas* in the present context as 'mental objects' is that it tends to suggest these *dhammas* to be the objects of meditation. This, however, is not the case, since these *dhammas* are not in themselves the objects of meditation, but rather constitute frameworks or points of reference to be applied during meditation. The fourth *satipaṭṭhāna* is not concerned with these *dhammas* as such, but rather with looking at whatever happens during actual practice in terms of these *dhammas*.

Perhaps this can best be illustrated with the example of a pair of glasses. The purpose of using a pair of glasses is to help sharpen and improve our eyesight, so that we can more clearly apprehend whatever comes within the range of our vision. This purpose would not be fulfilled if we were to look at the glasses themselves, instead of looking through them. Similarly, the *dhammas* mentioned for the development of mindfulness in the *Satipaṭṭhāna Sutta* are not in themselves the objects of mindfulness, but rather are to be applied to whatever becomes an object of the mind or of any other sense-door during mindfulness practice.

The first of these *dhammas* are the five hindrances, those detrimental mental factors or qualities which particularly obstruct the proper functioning of the mind and therefore all attempts at mental culture. These five hindrances are sensual desire, ill will, sloth-and-torpor, restlessness-and-remorse and doubt. In regard to these hindrances, the meditator's task is to recognize their presence or their absence, and to gain insight into how they arise, how they can be overcome and how their future arising can be prevented.

After covering the hindrances to meditative practice, mindfulness of *dhammas* next turns to two analyses of subjective experience: the five aggregates and the six sense-spheres. The five aggregates are bodily form, feeling, perception, volition and consciousness. The purpose of this aggregate presentation is to divide empirical personality into its constituent parts and thereby overcome the notion of a substantial and lasting self. Analysing oneself into these five aggregates counteracts this self notion, which constitutes the core of all attachments and cravings. Whatever we may take to be 'I', in the final count turns out to be only the conditioned interaction of these five aggregates. To overcome the notion of a lasting self, the instructions aim mindfulness in particular at the arising and passing away of these five aggregates. Practising in this way can lead to penetrative insight into the impermanent and empty nature of whatever we may identify ourselves with.

Mindfulness of the sense-spheres directs awareness to the eye, ear, nose, tongue, body and mind, together with their respective objects. The basic idea behind turning mindfulness to these six sense-spheres is to gain insight into experience being

made up of these different spheres, rather than constituting a compact unit. This serves to undermine the misleading sense of a substantial 'I' as the independent experiencer of sense objects. Another central task of mindfulness of the sense-spheres is to become aware of the arising of a fetter at any sense door. 'Fetter' here stands for whatever binds us to experience, causing desire and attachment. Awareness of the arising of a fetter is thus closely related to the development of bare mindfulness in regard to the process of perception, discussed earlier.

After these two analyses of subjective experience, concerned with the five aggregates and the six sense-spheres, mindfulness of *dhammas* turns to the awakening factors (*bojjhaṅga*). The awakening factors are those seven mental qualities or factors that lead to awakening. The first of these seven is mindfulness itself, followed by investigation-of-phenomena, energy, joy, tranquillity, concentration and equanimity. To develop mindfulness in relation to these seven beneficial mental qualities means to be aware of their presence or absence, and to know how they can be brought into being and further developed.

These awakening factors stand in a conditional relation to one another, each of them requiring the establishment of the previous factors in the list (MN.3.85). Here mindfulness stands in the first position, since mindfulness is the one quality on which all others depend. Mindfulness has moreover the task of monitoring the other six awakening factors, similar to its role among the faculties mentioned above. Whereas investigation-of-phenomena, energy and joy have a tendency to arouse and energize the mind, tranquillity, concentration and equanimity have the tendency of calming and quieting the mind (SN.5.112). Both tendencies have to be brought into balance, avoiding excess or deficiency. Mindfulness acts as a supervisor and brings about this balance. Only with well established mindfulness as a basis and as a continuous monitoring support will the other six awakening factors be able to lead to what their appellation defines as their true purpose: awakening.

Awakening as the culmination of mindfulness practice becomes particularly prominent with the last of the exercises listed in the *Satipaṭṭhāna Sutta*, mindfulness of the four noble truths. A thorough understanding of these four noble truths is gained with stream-entry, the first stage of awakening. This does not mean, however, that mindfulness of the four noble truths should be reserved only for the advanced stages of insight meditation. Mindfulness of the four noble truths is rather something to be applied at various levels and can be of considerable relevance in quite ordinary and mundane situations.

To understand the four noble truths is to understand *dukkha*, its arising, its cessation, and the path leading to its cessation. The structure underlying this presentation parallels a fourfold method of diagnosis and prescription used in ancient Indian medicine, proceeding from the diagnosis of a disease, to identifying the cause of the disease, the possibility of restoring health and the practical cure to be undertaken. Applied within early Buddhist psychology, the cause of the dis-ease of *dukkha* is craving and attachment, and the practical cure to be undertaken to reach complete mental health is the noble eightfold path, and therewith also the

practice of mindfulness. But before continuing with the practical dimensions of this mindfulness practice, a short look needs to be taken at the word *dukkha*.

The word *dukkha* has often been translated as 'suffering'. Suffering, however, represents only an aspect of *dukkha*, a term whose range of implications can much better be rendered by the word 'unsatisfactory'. The problem with the too narrow translation of *dukkha* as 'suffering' is that it tends to invest the early Buddhist teachings, and especially the four noble truths, with an unwarranted air of negativity, possibly even of pessimism.

The English word 'suffering', according to its dictionary definition, refers to 'bearing or undergoing pain, distress, injury, harm or punishment'. The inaptness of translating the Pāli term *dukkha* with the English word 'suffering' can be demonstrated with a Pāli discourse in which the Buddha stated that whatever is felt should be included under *dukkha*.[11] Translating *dukkha* as 'suffering' in this context could be misunderstood as proposing that all feelings are suffering. Such a proposal would conflict with the Buddha's analysis of feelings into three mutually exclusive categories, which are, in addition to painful feelings, pleasant and neutral feelings. According to this analysis, when experiencing a pleasant feeling, one does not experience either painful or neutral feelings (DN.2.66). Hence it would be contradictory to speak of pleasant feelings as 'suffering'.

Now pleasant feelings are bound to change. Yet the fact that they will change at a future point of time does not entail that at present such pleasant feelings are 'suffering'. In fact, the changing nature of feelings as such is not necessarily suffering, since in the case of painful feelings, for example, change will rather be experienced as pleasant. The Pāli discourses explicitly point out that just as the present experience of pain and the future change of pleasure may cause suffering, so the present experience of pleasure and the future change of pain can cause happiness.[12] Hence all feelings do not appear to be 'suffering', nor will their changing nature necessarily lead to 'suffering'. All feelings are, however, 'unsatisfactory', since due to their impermanent nature they cannot provide lasting satisfaction.

So the point made by the four noble truths is not to proclaim that 'all if suffering', but rather to highlight that for the unsatisfactory nature of the world to manifest in actual suffering, attachment and craving are required. Applied practically, then, mindfulness of *dukkha*, its arising, its cessation and the path leading to its cessation, can be undertaken by becoming aware of any type of attachment or craving occurring in everyday life. Examples for this are when our expectations get frustrated, when our ego is threatened, or when things do not go the way we want. Once this happens, the task is to mindfully acknowledge the underlying pattern of craving and attachment that has led to the arising of clinging and expectations, and to become fully aware of its resulting manifestation in some form of *dukkha*. Sustained practice undertaken in this way reveals the true magic of mindfulness, since the moment of recognition is already the first step out of the problem. Once the cause for the arising of *dukkha* is seen to be within us, letting go of the cause is already on its way.

## Mindfulness and receptivity

Looking back on the four *satipaṭṭhānas* as a whole, a closer inspection reveals that the instructions never include active interference with what happens in the mind. If anger arises, for example, the task of mindfulness is to know that a mental hindrance is present, to know what has led to its arising and to know what will lead to its disappearance. A more active intervention is no longer the domain of mindfulness practice, but rather belongs to the province of right effort, the preceding factor in the noble eightfold path.

The need to distinguish clearly between a first stage of observation and a second stage of taking action is a characteristic feature of the Buddha's way of teaching (It 33). The simple reason for this is that only the preliminary step of calmly assessing a situation, without immediately reacting, enables undertaking the appropriate action.

Although mindfulness may furnish the necessary information for a deployment of right effort and will monitor countermeasures by noting if these are excessive or deficient, still mindfulness remains an aloof quality of uninvolved and detached observation. Mindfulness can interact with other, much more active factors of the mind, yet by itself it does not interfere.

Such uninvolved and detached receptivity constitutes a centrally important characteristic of mindfulness. The *Satipaṭṭhāna Sutta* explicitly refers to this uninvolved and detached stance of mindfulness by enjoining that the practice of *satipaṭṭhāna* should take place without succumbing to reactions under the influence of desire or dejection.[13] This again highlights that the purpose of mindfulness is solely to make things conscious, to become fully aware of them, without giving room to emotionally coloured reactions.

Mindfulness silently observes, like a spectator at a play, without in any way interfering. Such silent and non-interfering observation can at times suffice to curb unwholesomeness, so that to be mindful can have quite active consequences. Yet the activity of mindfulness is confined to detached observation. In short: mindfulness does not change experience, it deepens it.

Developing mindfulness in this way has an intriguing potential, since it is capable of leading to a de-conditioning of automatic and habitual ways of reacting. Of central importance for such de-conditioning is the quality of receptivity inherent in the development of mindfulness. Such receptivity means to give full attention to whatever happens, instead of immediately reacting. Maintaining such bare and receptive mindfulness directly counteracts automatic ways of reacting, and thereby uncovers the extent to which we are reacting without conscious deliberation.

This non-interfering and receptive quality of mindfulness enables clear observation of the building up of reactions and their underlying motives. As soon as we become in any way involved in a reaction, this detached observational vantage point would be lost. The detached receptivity of mindfulness enables us to step back from the situation at hand, as it were, and thereby become an unbiased observer of our subjective involvement and of the entire situation. This

detached distance allows for a more objective perspective, a characteristic illustrated in the earlier mentioned simile of climbing onto a tower. Such a detached distance should be an integral part of any mindfulness meditation, so the *Satipaṭṭhāna Sutta* instructs, since a mindfulness practitioner should 'dwell independently and without clinging to anything in the world'.[14]

According to another discourse, this detached but receptive stance of mindfulness constitutes a middle path, since it avoids the two extremes of self-mortification and sense indulgence (AN.1.295). Translated into modern language, mindfulness constitutes the middle path between the two extremes of either suppressing an emotion or else compulsively acting it out. The receptivity of mindfulness, in the absence of both suppression and reaction, allows personal shortcomings and unjustified reactions to unfold before the watchful stance of the meditator, without being suppressed by the affective investment inherent in our self-image. Maintaining the presence of mindfulness in this way is not easy, since witnessing our own shortcomings only too easily can lead to unconscious attempts at reducing the resulting feeling of discomfort and the damage to our self-esteem by avoiding the perceived information. Only with sustained practice will it become possible to maintain unwavering mindfulness when faced with our own shortcomings. In sum, the receptivity inherent in the development of mindfulness has intriguing psychological implications.

## Mindfulness and wisdom

Another noteworthy feature of *satipaṭṭhāna* practice is that the *Satipaṭṭhāna Sutta* puts the types of feelings, states of mind etc. to be recognized into quotation marks, as if they were direct speech. In the case of being angry, for example, the instruction is to know 'I am angry'.[15] This points to the practice of naming what is taking place, in the sense of using mental labels in order to strengthen clear recognition during mindfulness meditation, which thereby become a tool for the development of meditative wisdom.

The skilful use of such labelling during mindfulness practice introduces an inner distance towards what is experienced. By naming our moods and feelings, these moods and feelings are turned into objects and thereby will be less experienced as 'my' mood or feeling. This helps to diminish identification with them and thereby serves as an important tool for gaining insight into the empty nature of all experience.

This instruction shows that concepts have a place within mindfulness meditation as labelling tools. In fact, concepts are closely related to the ability to recognize and understand. Thereby they are also related to the ability to gain insight and wisdom, which requires a minimum degree of mental verbalisation and therefore the use of concepts.

This does not mean, however, that to practice mindfulness is to be engaging in intellectual reflection. Mindfulness as such is bare awareness and free from concepts. Even as labelling tools during *satipaṭṭhāna* practice, concepts should come in only once the situation has been fully explored through bare mindfulness. Once this much has been accomplished, a brief use of concepts to strengthen recognition is

appropriate. After this, the mind again returns to bare mindfulness. The instructions in the *Satipaṭṭhāna Sutta* take account of the need to keep the use of concepts to an absolute minimum, indicating that such mental labels should be used only 'to the extent necessary for bare knowledge and continuous mindfulness'.[16]

The need to keep the use of concepts within limits can be illustrated with the example of someone taking a walk on a beautiful moonlit night. In order to see the road, this person may use a flashlight from time to time, just allowing a short burst of light to illumine the road. The use of mental labelling during mindfulness meditation is similar to such a short flashing up of the light. If however the flashlight were to be continuously switched on, the romantic beauty of the night walk would be lost and the batteries of the flashlight would soon get exhausted. Similarly, excessive use of concepts will cause loss of mental composure and soon exhaust the dynamic progress of insight meditation.

Wisely employing conceptual labels during mindfulness meditation will help to strengthen clear recognition and thereby support the development of insight and experiential wisdom. The gain of such experiential wisdom is in fact intrinsically related to the practice of mindfulness, a relationship illustrated the Pāli discourse with the help of several similes.

One such simile occurs in a Pāli verse, which describes the cooperation of mindfulness and wisdom in relation to the streams of desire. According to this verse, mindfulness keeps the streams of desire in check, so that the faculty of wisdom can cut them off (Sn 1035). This verse points in particular to the role of bare mindfulness as a restraining force in regard to the influence of desire during the perceptual process, a topic we came across earlier. A mind overwhelmed by desire is unable to gain wisdom, hence it is only once the development of bare mindfulness exercises this function of keeping 'the streams in check' that the necessary foundation for the development of wisdom has been established.

This ground-preparing quality of mindfulness for the development of wisdom recurs in another simile, which relates mindfulness to the goad and the ploughshare of a farmer (SN.1.172 and Sn 77). This imagery indicates that just as a farmer has to first plough the ground in order to be able to sow, so too mindfulness fulfils a preparatory role for the planting of the seeds of wisdom. Having said this much, we have however not yet exhausted the implications of this simile. While ploughing, such an ancient Indian farmer had to execute two tasks at the same time: with the goad in his one hand he had to ensure the straightness of the furrow by keeping the oxen moving in a straight line, while with the other hand he had to exert just the right amount of pressure on the ploughshare in order to avoid either getting stuck because he has pushed it too deeply into the ground or else only scratching over the surface due to lack of pressure. The combination of these two tasks by the ploughing farmer illustrates the need to combine clarity of direction with balanced effort when practising mindfulness.

The preparatory role of mindfulness for the development of wisdom recurs in another Pāli simile, which compares mindfulness to the probe of a surgeon (MN.2.260). Like the surgeon's probe, which provides information about the

wound for subsequent treatment, so too the probe of mindfulness can be used to carefully gather information, thereby preparing the ground for wisdom and insight. This simile highlights the role of mindfulness in providing the information whose insightful processing will result in wisdom.

The role of mindfulness in support of the arising of wisdom occurs again in still another simile, which associates the parts of an elephant's body with mental qualities and factors. In this simile, mindfulness corresponds to the elephant's neck (AN.3.346). An elephant's neck is the natural support for its head, which in the same simile represents the quality of wisdom. This imagery quite vividly depicts that mindfulness constitutes the natural support for wisdom. The choice of the elephant's neck is of additional significance, since according to the Pāli discourses it is a characteristic of both elephants and Buddhas to look around by turning with the whole body instead of turning only the head (MN.2.137). The elephant's neck, then, represents the quality of giving full attention to a matter at hand as a characteristic of mindfulness.

What the similes of 'keeping the streams in check', of the 'ploughshare', of the 'surgeon's probe' and of the 'elephant's neck' have in common is that they illustrate, from different perspectives, the preparatory role of mindfulness for the development of wisdom, a development which according to the *Satipaṭṭhāna Sutta's* instruction can make a wise but minimal use of conceptual labelling during actual meditation practice.

## Mindfulness and concentration

The continuous presence of well-established mindfulness is not only of relevance for the development of wisdom, but also forms an important requirement for deeper stages of concentration. Mindfulness constitutes a qualifying factor for the third level of absorption (*jhāna*) and reaches a high degree of purity with the attainment of the fourth absorption, due to its association with deep equanimity.[17]

The role of mindfulness in relation to deep concentration may well be why a discourse speaks of *satipaṭṭhāna* as the 'cause' for concentration.[18] In a similar vein Anuruddha, a disciple of the Buddha renowned for outstanding concentrative skills (AN.1.23), explained that his exceptional concentrative proficiency was the outcome of his practice of mindfulness (SN.5.294–306).

Even though these passages indicate that mindfulness fulfils an important role in regard to the development of deeper levels of concentration (*samādhi*), the characteristic functions of mindfulness and concentration on their own are quite distinct.

In order to appreciate this difference, we need to take a short look at the implications of the word *samādhi*, 'concentration'. The Pāli and Sanskrit noun *samādhi* is related to the verb *samādahati*, which means to 'put together' or to 'collect'. A typical example for the activity intended by this verb is when someone 'collects' wood to kindle a fire (Vin.4.115). Hence the noun *samādhi* stands for 'collecting' oneself, in the sense of composing, concentrating and unifying the mind.

The characteristic quality of such concentration is to focus the mind on a single object to the exclusion of everything else. Developed in this way, concentration promotes a shift from the common structure of experience as a subject–object duality towards an experience of unity. This focusing aspect of concentration excludes to some extent a broader awareness of circumstances and of their interrelations. Thus this type of stronger focus and its consequent narrowing of the perceptual field differs to some extent from the awareness of circumstances and interrelations provided by the broad and open mental attitude inculcated through mindfulness practice. To use a photographic analogy, to develop concentration is somewhat like using a zoom, while to practise mindfulness on its own is more like using a wide-angle lens.

This difference does not imply that concentration and mindfulness are incompatible, since during absorption attainment, both are present. Yet, during absorption mindfulness becomes mainly presence of mind, losing its natural breadth due to the strong focussing power of concentration.

The basic difference between these two mental qualities can be demonstrated with the vocabulary employed in a Pāli discourse. According to this discourse, when being distracted or sluggish while practising mindfulness one should temporarily change practice and develop a tranquillity (*samatha*) object of meditation, in order to cultivate internal joy and serenity. The Buddha spoke of this as a 'directed' form of meditation.[19] Once the mind has been calmed, however, one can return to an 'undirected' mode of meditation, namely the practice of *satipaṭṭhāna*.[20] The distinction drawn in this discourse between 'directed' and 'undirected' forms of meditation suggests that, considered on their own, these two modes of meditation are clearly different. At the same time, however, the discourse as a whole is concerned with their skilful interrelation, clearly demonstrating that whatever the degree of their difference, the two interrelate and support each other.

In summation, although mindfulness plays an important part in the development of deep concentration, considered on its own it constitutes a mental quality distinct from concentration. The reason why even deep levels of concentration by themselves do not suffice for liberating insight is quite probably related to the inhibition of the broadly receptive observational qualities of mindfulness through the strong focusing power of concentration. Concentration on its own does not suffice for becoming aware of those characteristics of experience whose understanding leads to awakening, which requires the broad and open type of observation developed through mindfulness meditation.

A crucial aspect in such broadly receptive observation through mindfulness is awareness of the arising and passing away of phenomena. The Pāli discourses highlight this requirement by indicating that such awareness of impermanence marks the difference between a mere establishment of mindfulness and its complete and full 'development'.[21] This indicates that to just be mindful as such will not suffice for developing penetrative insight. What is additionally required is to move from the content of any experience to its process character, to contemplate

the arising and passing away of whatever happens and thereby gain a comprehensive insight into impermanence. The *Satipaṭṭhāna Sutta* takes account of this requirement by explicitly mentioning it after each of the different exercises listed under the four *satipaṭṭhānas*.[22]

The same *Satipaṭṭhāna Sutta* brings up another aspect in relation to the development of mindfulness, which it similarly mentions after each of the individual exercises. This additional aspect is that mindfulness should be practised both 'internally' and 'externally'.[23] Another Pāli discourse indicates that these two expressions refer to directing mindfulness not only to what happens in regard to and within us, but also to what happens in regard to and within other persons.[24] According to yet another discourse, such a broadening of the meditative perspective constitutes an integral part of properly undertaking the four *satipaṭṭhānas*.[25]

These passages indicate that to practise mindfulness also includes awareness of the subjective experience of others. Though such externally directed mindfulness may seem quite feasible in the case of observing another person's body, to direct mindfulness to another's feelings or states of mind may at first sight seem to require psychic powers. This however is not the case, since externally directed mindfulness of another's feelings and mental condition can be undertaken by carefully observing their outer manifestations. Feelings and states of mind affect the outer appearance of a person by influencing their facial expression, the tone of their voice and their physical posture, so that it is possible to become aware of these without needing to develop telepathic powers.

To undertake such external mindfulness by directing awareness to another person's posture, facial expression and tone of voice as indicators of their feelings or state of mind constitutes a lead over from insight into the nature of our own feelings and reactions to understanding the feelings and reactions of others. For a balanced development of mindfulness, this shift from the internal to the external is of considerable importance. Mindfulness applied only internally can lead to self-centredness, to becoming excessively concerned with what happens with and within us, while at the same time remaining blissfully unaware of how our actions and behaviour affect others. The development of external mindfulness prevents such lopsidedness and helps to build up a skilful balance between introversion and extroversion.

In addition to the need to become aware of impermanence and to become 'externally' mindful, the presence of right view and good standards of morality are indispensable requirements if the practice of mindfulness is to yield its potential fruits (SN.5.143). Right view in the present context means in particular to acknowledge the role of craving and attachment as root causes for the human predicament, thereby appreciating that the way to real freedom lies in developing detachment and renunciation, in going beyond the bottomless vortex of attempting to satisfy desires. The other requirement, good standards of morality, refers to implementing the principle of harmlessness in regard to others as well as ourselves, in terms of refraining from killing, stealing, sexual misconduct, false speech and intoxication.

Once mindfulness practice is based on such moral conduct and right view, applied to ourselves and others and moreover equipped with awareness of the impermanent and therewith unsatisfactory and empty nature of reality, then the systematic development of this rather simple and unobtrusive mental quality of mindfulness has the potential of leading all the way to full awakening, and therewith to the realisation of complete mental health and unsurpassable liberation.

> Those whose pasture is liberation,
> empty and free from any mark,
> their path is hard to track,
> like that of birds in the sky.[26]

## Abbreviations

All quotations are according to the Pāli Text Society edition. The abbreviations used are:

| | |
|---|---|
| AN | Aṅguttara Nikāya |
| Dhp | Dhammapada |
| DN | Dīgha Nikāya |
| It | Itivuttaka |
| MN | Majjhima Nikāya |
| Ps | Papañcasūdanī |
| SN | Saṃyutta Nikāya |
| Sn | Sutta Nipāta |
| Th | Theragāthā |
| Ud | Udāna |
| Vibh-a | Sammohavinodanī |
| Vin | Vinaya |
| Vism | Visuddhimagga |

## Notes

1 MN.1.356: *satimā hoti, paramena satinepakkena samannāgato, cirakatampi cirabhāsitampi saritā anussaritā.*
2 SN.4.119: contrasting the *parittacetasa* to the *appamāṇacetasa*; cf. also MN.1.266, SN.4.186 and SN.4.199.
3 MN.1.117: *sati karaṇīyaṃ.*
4 SN.5.193: the *saddhindriya*, *viriyindriya*, *satindriya*, *samādhindriya* and *paññindriya.*
5 SN.5.115: *satiñca khvāhaṃ sabbatthikaṃ vadāmi.*
6 Since it is included in the definition of name (*nāma*) at MN.1.53.
7 AN.4.9. These two are the *kāmarāgānusaya* and the *paṭighānusaya*, the other five being the latent tendencies to views (*diṭṭhi*), doubt (*vicikicchā*), conceit (*māna*), craving for existence (*bhavarāga*) and ignorance (*avijjā*).

8 MN.3.301: *paṭikkūle ca appaṭikkūle ca appaṭikkūlasaññī* and *appaṭikkūle ca paṭikkūle ca paṭikkūlasaññī*.

9 *Indriya saṃvara*, described for example, at DN.1.70.

10 Ud 8: *yato te diṭṭhe diṭṭhamattaṃ bhavissati, sute sutamattaṃ bhavissati, mute mutamattaṃ bhavissati, viññāte viññātamattaṃ bhavissati, tato tvaṃ na tena; yato tvaṃ na tena, tato tvaṃ na tattha; yato tvaṃ na tattha, tato tvaṃ nev' idha na huraṃ na ubhayamantarena, es' ev' anto dukkhassa*.

11 SN.2.53: *yaṃ kiñci vedayitaṃ taṃ dukkhasmiṃ*.

12 MN.1.303: *sukhā vedanā ṭhitisukhā vipariṇāmadukkhā*, but: *dukkhā vedanā ṭhitidukkhā vipariṇāmasukhā*.

13 MN.1.56: *vineyya loke abhijjhādomanassaṃ*.

14 MN.1.56: *anissito ca viharati na ca kiñci loke upādiyati*.

15 MN.1.60: '*atthi me ajjhattaṃ byāpādo 'ti pajānāti*.

16 MN.1.56: *yāvadeva ñāṇamattāya paṭissatimattāya*.

17 MN.1.22: *sato sampajāno . . . tatiyaṃ jhānaṃ*, and: *upekkhāsatipārisuddhiṃ catutthaṃ jhānaṃ*.

18 MN.1.301: *cattāro satipaṭṭhānā samādhinimittā*.

19 SN.5.156: *paṇidhāya bhāvanā*.

20 SN.5.157: *apaṇidhāya bhāvanā*.

21 SN.5.183: *satipaṭṭhāna bhāvanā*.

22 MN.1.56: *samudayadhammānupassī viharati* and *vayadhammānupassī viharati*.

23 MN.1.56: *ajjhatta* and *bahiddhā*.

24 DN.2.216: speaks of *satipaṭṭhāna* developed *bahiddhā para kāye . . . para dhammesu*.

25 SN.5.294: *cattāro satipaṭṭhānā āraddhā honti*.

26 Dhp 93: *suññato animitto ca, vimokho yassa gocaro, ākāse va sakuntānaṃ, padaṃ tassa durannayaṃ*.

# 12

# THE TRANSFORMATIVE IMPACT OF NON-SELF

*Andrew Olendzki*

## An historic encounter

We live in interesting times, and are fortunate to witness the encounter between an irresistible force and an immovable object. The irresistible force is the Buddhist tradition, which has swept across Asia in past centuries and now impacts the world as a whole. The immovable object is the Western tradition, along with its entrenched ethnocentrism and lingering attitudes of intellectual ascendancy. Of particular interest is the encounter between the notions of selfhood and identity, so central to Western thought, and the radical challenge to these assumptions posed by the Buddhist teachings of non-self. Nothing is quite so cherished in Judeo-Christian, Greco-Roman, Euro-Enlightenment, Romantic-American and contemporary psycho-spiritual civilization as the self, which one might even say acts as the central organizing principle around which Western culture is patterned. And nothing is quite as uniquely Buddhist as the critique of this idea.

Will mainstream Western thought succeed in resisting the Buddhist teachings of non-self, either directly, by answering and refuting the Buddhist articulation of the doctrine, or indirectly, by deflecting and co-opting these teachings to serve more subtly the purposes of self? Or will the Western assumptions of self be moved or even eradicated by the onslaught of the Buddhist critique of identity, yielding a significantly different conception of the human condition on the part of Western thinkers? My own opinion is that the former is well underway in the present and in the foreseeable future, but that the latter will eventually transpire. At the moment the Buddhist view of non-self is not well understood in Western circles, allowing its marginalization even by those who ostensibly take it to heart. But I think a number of emerging trends in the cognitive and neurological sciences are pointing the way to the eventual integration of the non-self perspective into new models of consciousness and, by inevitable implication, of identity.

Two issues lie at the heart of these questions. The first has to do with how open the Western tradition is to new ideas coming from beyond its historical cultural territory, and, in particular, to what extent Western thinkers are capable of loosening

their hold on that which is most precious to them – their views of self identity. The other issue has to do with how compelling the Buddhist notion of non-self really is. Is it indeed an insight of such subtlety that it managed to avoid the scrutiny of the West's best thinkers for centuries? Or does it turn out to be, upon closer investigation, something not particularly interesting or useful beyond the narrow agenda of Buddhist didactics? In other words, is it a profound and universal truth about the human condition, or just an intriguing artifact of Indian thought?

The answer to such questions will only come from a careful investigation of the non-self teachings, and depends upon actually understanding what these are. Unfortunately there are several obstacles standing in the way of comprehending the Buddhist insight into non-self. Some of these are rooted in the limitations of language, and particularly in the languages used to express and understand Buddhist ideas. The structure of Indo-European languages, which includes both the Pāli used to express the core teachings and the English used to interpret them, are patterned around assumptions of agency and of subject/object relationship that do not easily yield alternative formulations. Another obstacle is that Buddhist insights into the nature of identity are built upon extensive empirical observation that is only available through the intensive practice of meditation and sustained attention to the texture of subjective experience. Such practices are not inherently unscientific, but require a level of training that is exceedingly rare in the contemporary world. But perhaps the most daunting obstacle is that, according to the Buddhist analysis of the issue, assumptions of self identity are so deeply ingrained in the human psyche, and so powerfully distort the ability to see clearly, that direct insight into the non-self nature of existence is only attainable after a considerable degree of transformative individual work. Just as certain core insights of science, such as those described by Galileo, Darwin, and Einstein, are so thoroughly counter-intuitive that many people even today do not accept them as true, so also the revelation of the insubstantial nature of identity is not easily seen or accepted by any but the most open-minded thinkers.

## The limitations of language

The limitations of language pose problems that are not easy to circumvent. Indo-European languages are largely built around nouns that take on modifiers and are subject to the action of verbs. This yields a habit of mind that is accustomed to construing the world as an edifice of persons, places, and things that exist, each having a defining essence, and to which can be attributed various qualities. But one of the core insights of Buddhist thought is that everything is so thoroughly in flux that only verbs can adequately signify dynamically arising and passing events. All nouns are an artificial construction of language, useful on conventional levels of discourse but inadequate as tools for looking closely at the nature of reality. As the nun Vajirā famously says, "Just as for an arrangement of parts there occurs the word 'chariot', so also when there are aggregates there occurs the

convention (*sammuti*) 'being' " (SN.1.135). The word used here for a conventional designation, *sammuti*, suggests a term that a number of people together (*sam-*) think (√*man*) carries an agreed-upon meaning. Nouns, in the Buddhist view, are a shared convention of language which artificially create islands of meaning upon a constantly shifting sea of becoming. To say conventionally that something exists is merely an abbreviated way of saying that a dynamic process of arising and passing is occurring.

English, it has been said, is a language in which any noun can be verbed. We can do this with most static objects, even "table," "chair," "stone," and "tree," and even more unusual examples of this tendency are popping up regularly in the American vernacular. However, the word for "self" seems to be uniquely resistant to this transformation, and remains stubbornly a noun. There may be plenty of room for phenomenal flux in English, but what the word "self" is used to designate is the essence beneath these changes, the underlying structure, the deeper pattern, the primary complex – the concept that, *by definition*, brings stability and order where the Buddhists unremittingly say it does not naturally belong. We have no acceptable way to say that one "selfed" yesterday, is "selfing" as we speak, but perhaps "will try not to self" as much next week. Any time we use "self" in a sentence, at least in English, we are forced into using it as an agent noun that "is" or "is not," that "does," "feels," or "thinks" things, or that "makes" something happen. In short, self is a noun that can *not* be verbed.

This is a substantial obstacle when it comes to trying to talk about, let alone understand, the Buddhist teachings about selfhood. If the English word "self" is thus thoroughly unsuited, and even incapable, of expressing the Buddhist insights into identity, then we should abandon it altogether and adopt "non-self" language. Any attempts to modify the word with adjectives, such as the "psychological self" or the "conditional self" or the "phenomenal self" are likely to do more harm than good.

## Refuted views of self

The notion of a self that the early Buddhists were challenging was based upon a number of assumptions and beliefs, each of which are carefully examined and contested in the Nikāya texts. The existence of a soul was considered self-evident to all the *samaṇa* (recluses) thinkers of the Buddha's day, and to those Brahmanical teachers who worked within the Upanishadic tradition. The arguments for the self taken on by the Buddhists included: *constancy*, the view that something unchanging underlay the perpetual flux of sensory and cognitive experience; *agency*, the felt sense of a person having the power to autonomously initiate action; *ownership*, the idea that all immediate experience was the intimate possession of a particular individual; *survival*, the widespread belief that an enduring personal pattern will be reborn after the break-up of the body; *responsibility*, the understanding that there must be a locus for the causal relations between a deed and its fruit; and *awareness*, the outlook that every individual is the center

of a locally generated field of experience, which is assumed to have sacred origins.

Constancy was challenged by an appeal to experience, and by an analysis of the nature of consciousness. Whereas the Upaniṣads regularly suggest there is something behind or underlying the flux of sensory and mental phenomena, the Buddhists argue that a thorough examination of the phenomenal field, composed of the 6 sense spheres, the 5 aggregates, and the 18 elements, will discover nothing exempt from the laws of change. Neither the organs, nor the objects, nor the act of cognition itself will ever arise and fall in the same way twice. The Buddha presented himself as someone who had mastered to his utmost the available techniques of asceticism and meditation, and who had used these tools to fully explore the constructed world of experience (MN.3.281ff.). It is from this perspective that he declared with great confidence that there was no essence, outside of or other than the field itself, that can be construed as an unchanging self. Moreover, having analyzed consciousness as a phenomenon emerging from the interaction of organs and objects of perception, he makes the argument that something dependent upon what is changeable cannot itself be exempt from changeability (SN.4.68–9). The Buddhist view is summed up by the poignant image, "This body's like a ball of foam, and feeling is like a bubble; perception is like a mirage, formations like a pith-less tree, and consciousness is like a trick; . . . no essence is discovered here" (SN.140–4).

Agency was similarly considered to be an unwarranted assumption based upon an unexamined view of the workings of intention. It is true that there are times when it appears choices are freely made, but this is by no means a widespread phenomenon. The Buddha is said to have questioned Saccaka, "When you say 'The aggregates are my self,' do you exercise any such power over the aggregates as to say: 'Let my aggregates be thus; let my aggregates be not thus'?" "No, Master Gotama," Saccaka had to concede (MN.1.232). It is one thing to be able to initiate some actions from time to time by the discretionary formulation of intention; it is another thing entirely to conclude from this that one is a free agent, operating outside the constraints of physical or mental cause and effect. Exposing the fallacy of the agent noun is one of the principal insights of the early Buddhists. The Buddha himself is represented as consistently deflecting questions begging for an agent noun, and it is a significant advance of human thought to be able to recast such questions in non-personal language. For example, when Moḷiya asks "Who makes contact? . . . who feels? . . . who craves?" the Buddha is said to reply, "Not a valid question." The same matter should be more accurately put "With what as condition does contact . . . feeling . . . craving come to be?" (SN.2.13–14). Again it is the teaching of dependent origination that provides a model for the rigorous excerpting of personal language from a thorough description of experience.

Ownership is also exposed as a projection of synthetic identity upon a process that is not inherently in anyone's possession. "This body is not yours," says the Buddha. "These feelings, these perceptions, these dispositions, these [moments of]

consciousness – are not yours" (SN.2.65). "Therefore, whatever is not yours – abandon it! This will lead to your welfare and happiness for a long time" (MN.1.40–1). These phrases articulate a remarkable observation from the phenomenological tradition of ancient India. They are not making a metaphysical statement about the nature of the mind and body; rather, they are exposing a deeply held and largely unexamined psychological reflex. Why is it that humans tend to feel possessive and acquisitive about all aspects of their experience? The ownership of property is embedded in most legal systems, but in drawing out the implications of the Buddhist insight one sees that this is an extension of a much more profound habit of the mind. Moreover, it is this very sense of ownership that is directly responsible for both individual and collective suffering. Ownership is a node around which greed and hatred coagulate, and is itself the expression of a profound delusion which gives rise to all sorts of strife. As the matter is succinctly put in the *Dhammapada*, " 'These sons are mine! This wealth is mine!' So are the misinformed incensed. But even their selves aren't their own – let alone sons, let alone wealth" (Dh.62).

Survival is a matter of some nuance in Buddhist thought. The position of the early texts seems to be that patterns of character and karma formation laid down in one lifetime serve to contribute to how experience is constructed in subsequent lifetimes. One might say, therefore, along with Nāgasena to King Milinda, "A continuity of dharmas is set up; one arises, another ceases . . . and neither one nor the other can be reckoned the last consciousness" (Miln.40). But this is a far cry from the sort of personal survival and rebirth proposed by those eternalists who take the soul for granted. Again as Nāgasena puts it, the one who arises in a new birth "is not the same and is not another" (Miln.40) in relation to the person who passes away. Whatever hope is aroused by the prospect of the next person being "not different" from the last person is dashed by the fact that the reborn individual is "not the same." Indeed, when the teachings of non-self settle deeply upon one's understanding, it is difficult to view a person even in the present life as maintaining some essential identity from moment to moment. When Sāti said he thought rebirth to mean the running-on of personal consciousness he was rebuked by the Buddha, "Misguided man, to whom have you ever known me to teach the Dhamma in that way? In many discourses have I not stated consciousness to be dependently arisen?" (MN.1.258).

Responsibility inheres to the Buddhist understanding of individual cause and effect, and a subtle model is put forward that does not require the idea of a soul accumulating karmic formations. In a discussion with Kassapa, the Buddha cautions against the view of an unchanging agent: "The one who acts is the same as the one who experiences the result . . . this amounts to eternalism." But neither can it be said that there is no relationship: "The one who acts is one, the one who experiences the results is another . . . this amounts to annihilationism" (SN.2.19–22). The Buddha's middle teaching in this matter has to do with the principle of dependent origination, wherein a complex interaction of impersonal events accounts for both continuity and change. The intentions of one moment

alter one's dispositions, out of which the next moment's intentions will be molded. This allows for radical, though incremental, transformation of character, brought about by moment after moment of healthy rather than unhealthy action. In fact in the Buddhist model actions and their consequences take on somewhat more substantiality than the self. Karma is actual, while selfhood is illusory. "Beings are heirs of their actions; they originate from their actions, are bound to their actions, and have their actions as their refuge. It is action that distinguishes beings as inferior and superior" (MN.3.203).

Finally, it is a widespread reflex of human thought that this node of awareness, which yields the rich yet mysterious phenomenon of subjective, immediate experience, must have sacred origins. Indeed there is nothing so intimate, nor so much a matter of ultimate concern, as the individual field of phenomenal awareness. The early Buddhists seem to understand and acknowledge this, but nevertheless caution against drawing unwarranted metaphysical conclusions on the basis of wishful thinking. In a discussion with a group of wise nuns, Nandaka points out the folly of investing substantial glory onto natural phenomena that are inherently dependent upon change. "Would anyone be speaking rightly who spoke thus: 'While this oil-lamp is burning, its oil, wick, and flame are impermanent and subject to change, but its radiance is permanent, everlasting, eternal, not subject to change?' " The nuns, of course, answer in the negative (MN.3.273). The early Buddhist texts weave together a way of understanding the human condition that is closer to modern scientific analysis than to religious impulses both ancient and modern. Nothing happens by chance, or by divine decree. Everything happens because of a network of causes, and these causes can be discerned. In order to open to this way of looking at things, one has to both relinquish appeal to the authority of tradition and entertain a hearty skepticism as to how much can be "hammered out by reason" (DN.1.16ff.). The alternative to these two approaches involves careful empirical observation.

## A phenomenal process

The Buddha appears to have been approaching the matter of identity from a radically phenomenological perspective. Using the ancient tools of asceticism, yoga, and meditation, he and many of his contemporaries were more interested in describing what is empirically observable in the mind and body than in theorizing from the abstract. As he put it in one of his discourses, "It is in this fathom-long carcass, with its perceptions and thoughts, that the world (*loka*) arises and passes away" (AN.2.48). This way of looking at things involves a very different understanding of the word "world" than we are accustomed to, and points the way to a different manner of construing "self." The word *loka* here refers not to the external world of rocks and trees (which can only manifest in direct experience as the conceptual handling of mental objects), but to the personal construction of a world of meaning in an individual psychophysical organism. As Sāriputta is said to have summarized the matter, "Life, personhood, pleasure and pain: this is all

that's bound together in a single mental event – a moment that quickly takes place" (MaNd.1.42).

The process language preferred by the Buddhism of the early textual tradition consists of spheres (*āyatana*) of sensory experience, groupings (*khandha*) of systemic functions, and patterns (*saṅkhāra*) of intention and disposition, all of which unfold together in mutual relationship (*paṭicca-samuppāda*), each moment (*khaṇika*), to shape (*kamma*) a world of individual experience (*loka*) which, because of certain habitual distortions of the mind (*vipallāsa*), tends to be mistakenly (*avijjā*) viewed as consisting of a truly existing self (*sakkāya-diṭṭhi*). Rather than being the starting point of experience, the essential agent needed to *have* experience, self is regarded as the end product of an elaborate process of assimilating data, constructing meaning and building a world of local experience. Rather than being an essential structure embedded in the psyche, self is regarded as a synthetic view that is fabricated every successive moment in the mind and body. Not only is the self as we cherish it unnecessary to the process, but it is considered by Buddhist tradition to be an erroneous, maladaptive and downright dangerous invention of our instinctive human greed, hatred, and delusion.

The details of how to understand the fabrication of the view of self as an event rather than as a structure are found in the teachings of dependent origination. Consciousness emerges as a phenomenon – an arising and passing episode of awareness – when a sense organ and a sense object make contact. This moment of contact *consists* of the cognizing of a sensory object (forms, sounds, smells, tastes, or touches) or a mental object (thoughts, memories, plans, etc.) by means of a sensory organ (the eye, ear, nose, tongue, or body) or by means of the mental organ (mind).

Also co-arising with this cognition is a momentary perception that identifies the object in light of past experience and stored recognition patterns, along with a momentary feeling (*vedanā*) tone that knows the object as pleasant, unpleasant, or as carrying a feeling tone that is more neutral. When underlying tendencies of attachment, aversion, or confusion are enacted, craving towards (or away from) the object also arises. Craving manifests either as wanting pleasant feeling to persist (even as it inevitably passes away) or as wanting an unpleasant sensation to go away (even as it continues to present unpleasantly at the sense door).

In the light of this disequilibrium between experience as it is manifesting and experience as one would want it to be, the mind and body naturally respond with an attitude the Buddhists call grasping or clinging (*upādāna*). Grasping is an intentional stance taken by the active response mechanisms of the psychophysical organism. It takes the form of either "attaching to" the object of the moment's experience or of "resisting" the object of experience. Whether it manifests as holding on or pushing away, the attitude of grasping creates an artificial distancing of "one's self" from what is happening in the moment. It is this grasping response that causes the becoming of self (*attabhāva*), the momentary birth and death of self identity, which inevitably involves suffering for oneself and others.

## Self as a product of grasping

Viewed in this way, grasping is not something done by the self; rather, the self is something done by grasping. To paraphrase how the matter is put in the Simile of the Snake discourse, "Only when there is what belongs to a self is there a self" (MN.1.138). It turns out that in the moment of trying to hold on to what is continually slipping away or of trying to push away what is relentlessly arising – the moment of grasping – a self is conjured up. The self can only exist as a fleeting attitude towards experience, one in which "the person who likes or does not like what is happening" is invented and defined. And that person, so precisely delineated by its response to the moment's experience, like everything else constructed by the mind and body, vanishes as quickly as it is created. The very next moment the whole "world" of locally constructed experience is cobbled together again, and if the attitude of liking or not liking is re-created, then so too will another self be fashioned as an epiphenomenon of the perceptual process.

This kind of a self – self as an event, self as a response – arises and passes away as relentlessly as everything else. A self is born and dies as fast as our senses are capable of constructing and relinquishing experience. When this happens repeatedly, then the natural abilities of the mind to synthesize unity out of diversity, continuity out of discreet episodes of cognition, yields the illusion of identity. Just as a series of still photos presented at high speed will be resolved by the mind into a continuous visual narrative, so also a succession of discreet "selves" will be identified in natural experience as the continuity of a singular self. While each "moment of selfing" is actually grounded in a unique combination of co-arising sense organ, sense object, consciousness, perception, and feeling, and is constructed by a unique intentional response to each moment, the patterns of such response demonstrated by any individual are both regular and idiosyncratic enough to yield the illusion of a unique self. Recalling again the words of the wise nun Vajirā, "In what is just a tangle of intentions and dispositions (*saṅkhāra*) – here a 'being' (*satta*) is not found" (SN.1.135).

As the matter is explicated in the early Buddhist psychological literature, the construction of personality – the fashioning of a self – only occurs when an attitude of possession or appropriation takes place. Grasping merely consists of regarding any aspect of experience with the stance "This is mine; this is me; this is my self" (MN.3.284). Contrary to popular belief, say the Buddhists, the "me" to which it all belongs does not actually exist – it is created for the occasion. When its moment passes away, another self is constructed to take temporary ownership of the next thing. Like a monkey swinging through the trees, consciousness grasps one object after another to create the "stream of consciousness" of felt experience. And like a burden clinging to the back of that monkey, the penchant to "become a self" (*attabhāva*), though ubiquitous, is not mandatory.

## Reversing the process

The habit of routinely projecting the view of a "really existing person" (*sakkāya-diṭṭhi*) upon all aspects of experience is deeply ingrained, perhaps even instinctual. But it is simply, if not easily, reversed. One has only to replace the grasping response, the reflex of holding on or pushing away, with an attitude of "This is not mine, this is not me; this is not my self" (MN.3.284). Since the view of a self is only created by identification with all aspects of experience – the objects of perception, the organs of perception, the act of cognizing the one with the other, the associated feeling tone, the corresponding perceptual icon – the view of self can be countered by systematically learning to dis-identify with the same field of experience.

How is this accomplished? It is a matter of holding oneself differently in the presence of every moment's experience. Non-self is more of an ongoing attitude than an alternative viewpoint. It involves participating consciously in the construction of sensory and cognitive experience, along with the texturing elements of perception and feeling, but not allowing the presence of pleasure or pain to give rise to liking or disliking the unfolding episode of experience. In short, overcoming the propensity to create a self who suffers each moment calls for replacing the reflexive response of grasping with *equanimity*.

The Pāli word for equanimity, *upekkhā*, carries the sense of looking ($\sqrt{}$*iks*) upon (*upa-*) what is unfolding. That part of the mind responding to what is arising, the intentional stance required by each moment, becomes neutral rather than holding on or pushing away. Equanimity is not the sort of neutrality that disengages or becomes disinterested, but rather is an attitude that is capable of embracing either pleasure or pain without reflexively reacting to them. Being able to "look upon" pleasure without being seduced by it into the craving for more, or being able to "look upon" pain without pushing it away or craving for it to cease, involves a very different quality of response than what comes instinctively. The means for cultivating this quality is given in the meditation instructions of the Foundations of Mindfulness Discourse: "One abides observing (*anupassin*) body as body, feeling as feeling, mind as mind, and mind objects as mind objects" (MN.1.56). The word for observing used here has the sense of seeing ($\sqrt{}$*pass*) along with (*anu-*) what is arising, of regarding what is unfolding without the interference of grasping.

In the actual practice of meditation one will find that the mind regularly intervenes on experience by liking or not liking, wanting or not wanting, but with patience and perseverance the new attitude of watching dispassionately can be gradually developed. At some point the meditator will be able to actually witness the process of self-creation as it unfolds. One learns to discern the differing texture of a moment's experience tinged with desire and a moment's experience held instead with equanimity. The former is always laced with some subtle sense of disequilibrium and dissatisfaction, while the latter is capable of a deep sense of well-being even in challenging circumstances. Access to the experience of well-being is regularly blocked by the construction of a self that holds on to or

pushes away what is arising; but when the intervening sense of self is even temporarily abandoned through non-grasping or equanimity, then one can immediately access conscious experience which is naturally devoid of disturbances. The sense of this non-acquisitive abiding in the present moment is reflected in the verse: "What went before – let go of that! All that's to come – have none of it! Don't hold on to what's in between, and you'll wander fully at peace" (Sn.949).

Although such equanimity is often regarded as a "distancing" of oneself from experience, those who practice it regularly will soon discover that a far greater intimacy develops, calling for a good deal of courage, as the intervening concept of self is moved aside and experience is encountered more directly. When selfhood and identity are constructed in any given moment of experience, one is not capable of engaging the full force of consciousness with the sensory or cognitive field. And when awareness is fully engaged with an object as it is, there is nothing left over with which a sense of self can be created. Put another way, when the senses are filled to their capacity by consciousness, one looses oneself. While this sounds threatening in principle, most people actually cherish the rare moments of heightened awareness that often accompany such a "loss of self."

## Self as an option

One way to help understand what is happening each moment is to introduce the notion of consciousness and of selfhood as being parallel but asymmetrical transitive concepts. According to the Buddhist analysis, all conscious experience depends upon the inherent transitivity of consciousness – one can only be aware *of* something. Whether seeing a form, hearing a sound, smelling an odor, tasting a flavor or "thinking" a "thought," all forms of cognition involve the cognizing of an object. This insight points to the extent to which consciousness is an interactive process rather than an isolated and disembodied entity. But contrary to the conventional wisdom, a subject is not automatically created along with the object. While *knowing* requires an object that is known, the *knowing of an object* does not necessitate a "knower." The subject only arises in a subsequent operation, when the act of consciousness is accompanied by some level of liking or wanting. Wanting is also an inherently transitive concept, but one that requires the creation of a subject rather than an object. For the notion of wanting to make any sense, there must be a person who enacts the episode of wanting. The object of that person's desire can be vague or even completely unknown, but wanting itself is a function of a person's inner intentional stance.

This is demonstrated by the most common word used in the early teachings for desire, the word craving (*taṇhā*) which more elementally means *thirst*. Thirst describes a condition of disequilibrium experienced by a person. Whether they are thirsty for water, for alcohol, for justice, or for love is a secondary matter. The thirst can be triggered by the smell of water, for example, but the smelling of the odor is one thing and the wanting it for oneself is another.

So it is the nature of consciousness to create *objects* of experience using the sensory and cognitive organs (which are themselves non-personal or self-less) as a means of doing this. And it is the nature of desire to create *subjects* who arise through the establishment of a particular relationship to these objects of experience. A self is concocted as *the one who* likes or dislikes what is arising in consciousness, *the one who* accepts or rejects the content of the moment. And while a self can never develop without the construction of experience, enabled by the activity of consciousness, the reverse is not true: it is possible to have experience without the construction of a self. According to the Buddhist teachings, the self is abandoned whenever desire is abandoned, and consciousness is thereby freed from an unnecessary burden. The self is revealed as a secondary, almost parasitic, epiphenomenon to the human psychophysical system, bringing with it all manner of difficulty and suffering.

The awakening experienced by the Buddha under the Bodhi tree when he was thirty-six years old is described in the early Buddhist literature as cleansing the mind and body of its toxins – desire and ignorance. Greed, hatred, and delusion are primal instincts, and probably have contributed much to the survival of both human and non-human species. But these root emotions have become maladaptive in the social and psychological realms humans now inhabit, and are directly responsible for the manifestation of suffering. The Buddha is said to have discerned the subtle but profound truth that these qualities operate through instigating and reinforcing a view of self that sets itself off from what is arising and passing in experience. By shining the light of introspective awareness on the mechanism by which this occurs, one becomes empowered to reorder the process at any moment by replacing grasping with equanimity.

As the matter is stated in a poem attributed to the Buddha, "Seeing people locked in conflict, I became completely distraught. But then I discerned here a thorn – hard to see – lodged deep in the heart" (Sn.938). The thorn in the heart is desire, deeply embedded in human instinct, which operates, through the construction of an illusory self, as an organizing principle around which all experience is ordered. The verse continues: "It's only when pierced by this thorn that one runs in all directions. So if that thorn is taken out – one does not run, and settles down" (Sn.939). With the recognition that the desiring self is the source of so many problems, the removal of this thorn will enable a profound healing of the mind and body.

## The promise of non-self

The Buddhist doctrine of non-self is better seen as a practical antidote to a pernicious human problem than as an alternative metaphysical view. As the contemporary exploration of consciousness progresses, and as its mysteries are gradually revealed, the insights of ancient Buddhism become more relevant than ever. The postmodern view of the human condition is increasingly discovering the extent to which constructed experience is conditioned by interactive forces such as

language, culture and gender, and the neurosciences are ever more comprehensively mapping the co-arising of subjective experience with electrochemical brain activity. As these movements progress, the received tradition regarding the soul is being inexorably run to ground. But just because we are compelled to give up on one extreme, the existence of a sacred and ineffable soul, does not mean we must simply embrace the other extreme, the reduction of human experience to its "merely" physical underpinnings. The middle way proposed by the Buddha encourages the abandoning of outdated and counter-productive superstitions, but also invites getting far more intimately involved – moment after precious moment – with every nuance of subjective experience.

I suspect that the Buddhist teaching of non-self will become increasingly important to the intellectual drama unfolding in the new sciences of consciousness and human potential, not because it is being proven "true," but because it offers a profound and meaningful outlook with which to fill the vacuum left by the loss of the soul. Something held as precious is very likely to be dislodged as the Buddhist view of non-self encounters the emerging contemporary understanding of mind and body, but it may turn out that something even more valuable will be discovered. The world of human experience may indeed be a virtual world, insofar as it is woven of sense spheres, aggregates, and moments of cognition. And while this might be ontologically disappointing, it can be phenomenologically fascinating. The apparent need to *be someone*, so deeply inculcated by the great thinkers of the West, is viewed by Buddhist tradition as an unfortunate insecurity beyond which humanity is capable of evolving in a natural process of maturation. What replaces the imperative to forge an identity is an invitation to awaken to the full potential of conscious awareness. With the self out of the way, one is capable of ever more insightful mindfulness, which opens to exploration a vast and profound inner landscape.

## Abbreviations

All references are to the primary texts of the Pāli Tipitaka, noted by volume and page number in the Pāli Text Society editions.

| | |
|---|---|
| √ | Root word |
| AN | Aṅguttara Nikāya |
| Dh | Dhammapada |
| DN | Dīgha Nikāya |
| MaNd | Mahāniddesa |
| Miln | Milinda Pañhā |
| MN | Majjhima Nikāya |
| SN | Saṃyutta Nikāya |
| Sn | Sutta Nipāta |

# 13

# TSONG-KHA-PA'S GRADUAL PATH SYSTEM FOR ENDING MENTAL AFFLICTIONS AND HIS METHODS FOR COUNTERING ANGER

*James Apple*

## Introduction

This chapter focuses on methods to counter anger according to Tsong-kha-pa, a fifteenth-century Tibetan Buddhist scholar and founding figure of the Gelukpa (*dge lugs pa*) tradition. After briefly introducing the figure of Tsong-kha-pa, we discuss elements in his Tibetan Buddhist worldview which are formative in his approach to anger. These elements include Tsong-kha-pa's understanding of the nature of mind and mental states, his strict adherence to the principles of karma (action) and rebirth, and the correlation of actions with pleasant or unpleasant effects to virtuous and non-virtuous states of being. We then contextualize Tsong-kha-pa's countering of anger within the framework of his integrated system of Mahāyāna Buddhist moral and mental cultivations. This integrated system is known as the gradual stages on the path to awakening (*lam rim*).

Tsong-kha-pa discusses the inappropriateness of anger and the countermeasures that one can cultivate against it in the context of developing the perfection of patient forbearance (Tibetan: *bzod pa*, Sanskrit: *kṣānti*). Tsong-kha-pa's discussion initially centers on generating an acute awareness for the negativities of anger and the benefits of patient forbearance. He then utilizes reasoning procedures to examine the casual factors that underlie the arousal of anger and then demonstrates how anger is considered inappropriate. Through the practice of patient forbearance, Tsong-kha-pa encourages the cultivation of the capacity to withstand adversities and the ability to remain undisturbed by either negative internal mental afflictions or external unfortunate circumstances.

## Tsong-kha-pa blo-bzang-grags-pa[1]

Tsong-kha-pa blo-bzang grags-pa (1357–1419) was a renowned scholar, monk, philosopher, and meditation master who was one of the most profoundly influential

and innovative minds in the history of Tibetan Buddhism. According to traditional biographies, Tsong kha pa, in a previous incarnation, was a young boy who offered Śākyamuni Buddha a crystal rosary and received a conch shell in return. The Buddha then prophesied the boy would be born in Tibet and be instrumental in the spread of Buddhism in the "Land of Snows." This prophecy would be fulfilled in 1357 when Tsong-kha-pa was born as the fourth child to an ordinary nomadic family in the Tibetan province of Amdo. Tsong-kha-pa would go on to become a prominent figure in Tibetan Buddhist scholarship referred to in the later tradition as "the Second Buddha" (*sang rgyas gnyis pa*). An erudite and thoroughly trained scholar, Tsong-kha-pa was also an accomplished practitioner who blended together theory and practice, utilizing both an emphasis on monastic discipline and the techniques of Buddhist Tantric transformational technology. He is most widely known as the founder of the Ganden-pa (*dga'-ldan pa*) school, which later developed into the present-day Gelukpa (*dge-lugs-pa*) school, of which the fourteenth Dalai Lama Tenzin Gyatso is affiliated.

Tsong-kha-pa, also known as Jey Rimpochey (T: *rje rin-po-che* precious venerable one), lived during a unique period of Tibetan Buddhist history that provided the cultural conditions for his meticulous and erudite scholarship. This pivotal point, which D. S. Ruegg[2] refers to as the "classical-systematic" period of Tibetan Buddhist doctrinal development, was the cusp between the full assimilation of Indian Buddhism and its systemization, the "high point of Tibetan textual exegesis, philosophical penetration and systematic hermeneutics." This was a period of Tibetan Buddhist development in which all the major Indian Buddhist commentaries had been translated and several generations of indigenous Tibetan interpreters had composed commentaries to Indian Buddhist materials. As such, it was a period where it was possible for the first time to examine all Indian Buddhist commentaries in a standardized religious language (*chos skad*) that allowed for new intellectual developments to take place.

The Tibetan scholastic cultural purview that was inherited from India was modeled upon the study, reflection, and exegesis of Indian Buddhist *śāstras*, technical texts composed of stanzas usually accompanied with a commentary (i.e. *Madhyamakāvatāra*, *Pramāṇavārttika*, *Abhidharmakośa*, etc.). This genre of Buddhist literature had been translated primarily during the second wave (*phyi dar*) of scriptural importation into Tibet several hundred years earlier (ninth to tenth century). Scholar-monks such as Tsong-kha-pa would have memorized such technical treatises and been able to utilize this mnemonic skill in debating and refining subtle hermeneutical points of textual exegesis.

Our exegesis and interpretation of Tsong-kha-pa's concept of virtue and spiritual exercises to counter anger will draw upon his *Byang chub lam rim che ba*, "*The Great Treatise on the Stages of the Path to Enlightenment*" (= *Great Treatise* hereafter).[3] This text, completed in 1402, has been referred to as "one of the greatest religious or secular works in the library of our human heritage" (Thurman, p. 13 in Cutler *et al.* 2000) as well as "one of the most renowned works of Buddhist thought and practice to have been composed in Tibet"

(Ruegg, ibid.: 17). We have focused on the *Great Treatise* as it provides an in-depth independent synthesis of his ethical, religious, and philosophical Buddhist soteriological system and explicitly discusses countermeasures to anger.

### *Tsong-kha-pa's worldview*

In order to understand how Tsong-kha-pa approaches the problem of anger and his countermeasures against it, we will first describe several important concepts assumed in his classical Tibetan Buddhist worldview. Tsong-kha-pa's overarching soteriological worldview concerns the training or the transformation of the mind (*blo sbyang ba*) in a gradual sequence aimed ultimately at attaining full awakening for the sake of helping other beings. The program for achieving full awakening and the guidelines for each step along the way are extensively described in the *Great Treatise*. Here we will focus on aspects of those instructions that are relevant to understanding how countermeasures against anger can be developed and the capacity for patient forbearance (*bzod pa*) cultivated.

### *The mind and the mental*

For Tsong-kha-pa, as well as most traditional Buddhists, the root at the whole of saṃsāra, the repeated cycle of rebirth and re-death along with all its sufferings, and nirvāṇa, the complete cessation of all suffering, is the mind itself. Therefore, what is most important in the context of Tsong-kha-pa's soteriological framework is that one understands the structure of the mind and mental states and then implements this knowledge as a means for training one's mental continuum.

Tsong-kha-pa understands the mind as an informative awareness endowed with a luminous and pure potential. He recognizes conscious awareness (*shes pa*), mind (*blo*) and cognitive knowledge (*rig pa*) to be synonyms that refer to mental events, or episodes, states of consciousness or awareness where a subject (*yul can*) cognizes an object that appears to it.[4] Tsong-kha-pa also assumes that the mind in its natural state is "luminous" (*gsal ba*) and "pure" (*rnam dag*). Various impure mental afflictions such as anger and attachment are considered adventitious (*glo bur ba*). Luminosity and purity of the mind does not mean for Tsong-kha-pa that the mind has always primordially been free from mental afflictions. Rather, luminosity and purity signify the potential to be free from negative mental afflictions, such as anger and hatred, based on the mind's lacking intrinsic essence (*rang bzhin med pa*) or substantial existence (*rdzas pa*). Since mental afflictions lack intrinsic essence, the mind has the potential to be reconditioned and reoriented, purged of negative habituations and latent propensities.[5]

As Dreyfus (2002: 35) notes, Buddhist scholars such as Tsong-kha-pa consider the mind to consist of a flow of individual moments of awareness relating to their objects rather than being a storage bank of data or the apparatus of a mechanical brain that gives rise to thoughts and ideas. This sequential flow of causally interrelated moments of awareness constitutes a mental continuum (T: *rgyud*, S: *santāna*).

The mental states that compose such a stream of awareness may apprehend real or imaginary things as their objects of cognition (*shes bya*). Based on this general definition of mind as "that which is clear and cognizes," Tsong-kha-pa posits many different types of mind or consciousness (*blo rigs*) such as sense awareness, mental awareness, gross minds, subtle mind, and very subtle minds. He also posits different categories of mind dependent upon the mode of activity. So from the point of view of how they engage their objects, minds may be categorized into either conceptual (*rtog pa*) or non-conceptual minds (*rtog med*). From the standpoint of the objects which dominate, minds may be classified into either sense awareness (*dbang shes*) or mental awareness (*yid shes*). A sevenfold scheme of minds drawn from the Indian Buddhist epistemological tradition is posited in relation to distinguishing valid (*tshad ma*) from non-valid (*tshad min*) modes of cognition and awareness. Important for our purposes here will be the analysis of the mind in terms of primary minds (*sems*) and mental factors or states (*sems byung*) and the distinction between 'reasoned knowledge' or reasoning consciousness (*rig shes*) and conventional everyday awareness (*tha snyad pa'i shes pa*). Within this typology, Tsong-kha-pa postulates the ways in which virtuous and accurate mental factors or states may be identified and cultivated while non-virtuous and erroneous mental states may be replaced and discarded. The human mental continuum in Tsong-kha-pa's worldview has the potential for reaching an extensively developed (*rgyas*) and perfectly purified (*sangs*) state of awakening (T: *sangs rgyas*, i.e. *Buddha*).

### *The principles of karma, rebirth, and saṃsāra*

Tsong-kha-pa completely assumes a classical Buddhist worldview in his articulation of the gradual stages leading to awakening. This worldview is comprised, in brief, of the idea that living beings undergo repeated cycles of rebirth and re-death (T: *'khor ba*, S: *saṃsāra*) within an ancient Indian cosmological division of multiple heavenly and hellish spheres propelled by afflicted mental states (T: *nyon mongs*, S: *kleśa*) and karma. Karma, literally "action" from Sanskrit – "kṛ" – "to do, to perform," is understood as a universal principle of cause and effect. Deeds of body and speech, based on volitional mental impulses, produce results under certain circumstances. These actions are considered to ripen under the one responsible for a deed. In order for the deed to produce an effect, it must be morally good or bad and be conditioned by a volitional impulse. The impulse leaves a trace or propensity in the mental continuum of the individual life-stream that leads one's destiny in the direction determined by the effect of the deed. The ripening and effect of actions may take necessarily one or more rebirths. Actions can be of the nature of body–physical, speech–verbal, and mind–mental. The effect is primarily determined by the intention of the action. In this regard Tsong-kha-pa cites the *Abhidharmasamuccaya*[6] in the *Great Treatise* [237]: "What is intention? It is mental karma (T: *yid kyi las*, S: *mānasakarma*) that conditions the mind; it has the function of causing the mind to engage with what is virtuous,

non-virtuous, or neutral." Intention, therefore, is perceived as a mental karma, a mental process that urges the mind with which it is associated toward objects. Tsong-kha-pa [238] understands physical and verbal actions to be motivated by such mental intentions. *Abhidharmakośa* states[7] that "Karma is intention and that produced by intention; intention is mental karma; physical and verbal karma are produced by intention."

In addition to these principles, Tsong-kha-pa provides four outlines of karma in his *Great Treatise* [158–162]. The first is that the force of karma is definite (*las nges pa*) in that virtuous actions always lead to happiness and non-virtuous leads to suffering. We will discuss below the manner in which Tsong-kha-pa's concept of karma shapes his understanding of virtue and non-virtue. Second, karmic imprints increase in their magnification (*las 'phel ba*) in that the result is greater than the cause. Third, one will never experience a karmic result of an action one has not done (*las ma byas pa dang mi phrad pa*). The fourth principle of Tsong-kha-pa's description of the general characteristics of karma is that causes that have been created are never lost and actions that one has done do not perish (*las byas pa chud mi za ba*), unless one undertakes some type of countermeasure.

Tsong-kha-pa posits different types of karma according to their theorized results. Virtuous actions are thought to leads to upper realms of rebirth among humans and gods. Non-virtuous action leads to lower realms of rebirth among hell-beings, ghosts, or animals. Tsong-kha-pa summarizes all the potential varieties of karma into ten unwholesome paths of action. These consist of three physical paths of action: killing, stealing, and sexual misconduct; four verbal paths: lying, slander, harsh words, and gossip, and three mental: greed, hatred, and ignorance. Each of the paths of karma takes place through the completion of four aspects. The first concerns the basis, that is, the thing or person towards whom the action is directed. Next is the attitude or the perceptions, motivations, and/or mental afflictions underlying the action. The third aspect is the performance or actual commission of the action. The fourth and final aspect is the culmination that gives rise to the corresponding reciprocal effects. We note these characteristics of Tsong-kha-pa's understanding of karma in that this directly correlates with his understanding of virtuous or non-virtuous action, the soteriology of his Buddhist path system, and in the context of spiritual cultivations for counteracting anger.

## *Virtue*

For Tsong-kha-pa, virtue and happiness have to be understood in relation to the aforementioned doctrine of karma and its result. Actions and mental states are defined as virtuous or non-virtuous in relation to the pleasant or unpleasant effect they are thought to bring upon an individual and his or her environment. Tsong-kha-pa does not provide a clear definition of virtue in and of itself in the *Great Treatise*, rather, he connects virtue to pleasant results of action. The Indian

Buddhist scholar Vasubandhu does this as well when he states:

> A virtuous (T: *dge ba*, S: *kuśala*) act is salvific because it brings about pleasant retribution and in consequence protects from suffering for a certain time (this impure good act); or because it leads to the attainment of Nirvāṇa, and, in consequence, protects definitively from suffering (this is the pure good act).[8]

Actions and mental states are considered virtuous because they correlate to activity that produces beneficial results. Beneficial results may include temporal happiness in this life or future lives in higher states of rebirth or the long-term happiness of Arhatship and Buddhahood. The important point is that Tsong-kha-pa understands these states to strictly correspond with results from past actions. In this regard, Jey Rimpochey states in the *Great Treatise* that:[9]

> The infallibility of our actions means that, whether we are ordinary individuals or Noble beings, any pleasure occurring as pleasant feelings – even just the pleasant sensation from a cool breeze experienced by those born in hell – arises from previously accumulated virtuous karma. It is not possible for happiness to arise from non-virtue. Also, any suffering occurring as unpleasant feelings – even just an unpleasant feeling that has arisen in the mental continuum of an Arhat – occur from the accumulation of non-virtuous karma. It is not possible for suffering to occur from virtuous karma. The *Ratnāvalī* states that "From nonvirtue comes all suffering, likewise all negative rebirths. From virtue come all positive rebirths, and the happiness within all births."[10] Therefore, happiness and suffering do not occur without a cause nor do they occur from inappropriate causes such as Primal Essence,[11] Īśvara, and so forth. Rather, in general, happiness and suffering come from virtuous and non-virtuous karma, and the various particular forms of happiness and suffering arise distinctly, without even the slightest conflation, from various particular instances of these two types of karma. Attaining certain knowledge of this regularity (*nges pa*), or non-deceptiveness, of karma and its effects is called "the correct view of Buddhists" and is praised as the foundation of all positive qualities.

As Dreyfus points out (1995: 43), determining which actions produces positive effects is a complicated and difficult task, and in the final analysis traditional Buddhist scholars like Tsong-kha-pa rely on the scriptural testimony of what enlightened beings have determined to be virtuous. In this way practices are determined as virtuous in relation to their results as attested in scriptural texts.

This applies to the typology of virtuous mental states. Moreover, Tsong-kha-pa appeals to scriptural texts such as the *Abhidharmasamuccaya* and the *Abhidharakośa*

for the types of mental states that are thought to be virtuous and non-virtuous. Based on these texts, 11 mental states are thought to be virtuous: faith (T: *dad pa*, S: *śraddhā*), self-respect (T: *ngo tsha*, S: *hrī*), embarrassment (T: *khrel yod pa*, S: *apatrapā*), non-attachment (T: *ma chags pa*, S: *alobha*), non-hatred (T: *zhe sdang med pa*, S: *adveṣa*), non-deludedness (T: *gti mug med pa*, S: *amoha*), diligence (T: *brtson 'grus*, S: *vīrya*), pliancy (T: *shin tu sbyangs pa*, S: *praśrabdhi*), conscientiousness (T: *bag yod*, S: *apramāda*), equanimity (T: *btang snyoms*, T: *upekṣa*), and non-harm (T: *rnam par mi 'tshe ba*, S: *avihiṃsā*).

In general, virtuous mental states may be classified in terms of the context in which they occur or how they arise. Such mental states may arise due to the latent propensities of previous lives that are acquired before birth, on account of practice, or in the presence of a sacred teacher or special environment in which one listens to the Buddha's teachings. Virtuous mental states may occur due to the performance of beneficial activities that help a being's capacity for spiritual awakening. Virtuous mental states are regarded as protective in that distinct, wholesome karmic activity enables one to obtain higher forms of rebirth and definite liberation from suffering. Such virtuous mental states are understood by Tsong-kha-pa as remedies and antidotes in that they possess distinct powers that directly counter unharmonious factors and can lead to the complete pacification of suffering through actualizing the third Noble Truth of the cessation of suffering.

The non-virtues for the most part are the opposite of virtuous qualities. The most basic of non-virtues are the primary mental afflictions (T: *nyon mongs*, S: *kleśas*) and the secondary mental afflictions (*upakleśas*) and the imprints and activities that result from them. The six fundamental mental afflictions are considered to be attachment (T: *'dod chags*, S: *rāga*), anger (T: *khong khro*, S: *pratigha*), pride (T: *nga rgyal*, S: *māna*), ignorance (T: *ma rig pa*, S: *avidyā*), doubt (T: *the tshom*, S: *vicikitsā*), and false views (T: *lta ba*, S: *dṛṣṭi*). We will focus on the mental afflictions of anger and ignorance below.

Non-virtuous qualities permeate saṃsāra and its sufferings in that negative activities of body and speech are motivated by afflictions. The non-virtuous can also be classified according to its circumstances: non-virtuous qualities acquired by birth for example, includes compulsively engaging in killing other beings through merely being born with latent propensities acquired in previous lives. Non-virtuous qualities may develop in the context of negative environmental circumstances or actions from misguided friends. Non-virtues in general are thought to consist of activities through body, speech, and mind that cause harm either oneself or sentient beings.

The classification of virtuous and non-virtuous mental states and their karmic repercussions, which are based on the testimony of canonical texts, are essential for Tsong-kha-pa. They enable one to recognize the object and aspects of the virtuous and non-virtuous when practicing the stages of the path to awakening.

### *Tsong-kha-pa's integrated system of Mahāyāna Buddhist moral and mental cultivation*

Tsong-kha-pa presents the *Great Treatise on the Stages of the Path* as a detailed set of instructions for those who wish to practice the Mahāyāna Buddhist path, namely bodhisattvas (T: *byang chub sems pa*), from the onset of the path up unto Omniscient Buddhahood. The *Great Treatise* instructions are set out in sections which are further divided into subsections and individual rubrics (Ruegg 2000: 17) with each division providing reasoned discourse and scriptural citations to guide the practitioner through a series of mental cultivations. In this manner, the analytical procedures, reasoned discourses, and scriptural quotations discussed in the *Great Treatise* are not primarily understood as polemical rhetoric against former commentators or partisan diatribes against opponent groups, but, rather, may be seen as an internal dialogue that leads the reader gradually through a series of cultivations aimed at profound mental transformation. This bears resemblance to the manner in which the classicist scholar, Pierre Hadot, has re-described the ancient Greek term *philosophia* as the practice of spiritual exercises embodying a way of life in ancient Hellenistic culture. In Hadot's view, *philosophia* is "a form of life defined by an ideal of wisdom" (1995: 59), where wisdom brings about a transformation of the person involving freedom from things such as "worries, passions, and desires" (1995: 103). To achieve such a transformation, the philosopher undertakes particular exercises of reason "designed to ensure spiritual progress toward the ideal state of wisdom."[12] Likewise, Tsong-kha-pa's *Great Treatise* embodies a series of spiritual exercises utilizing reasoned discourse to bring about a transformation of the person from the mental afflictions (*nyon mongs*) and karmic propensities such that they are able to achieve long lasting peace beyond suffering (*mya ngan las 'das pa*) and ultimately, through achieving complete Buddhahood, accomplish the welfare of others. The exercises in this instance are composed of a combination of meditative stabilizing procedures (*'jog sgom*) and analytical meditative realizations (*dpyad sgom*) that familiarize and condition the mind (*goms*) with wholesome qualities and cognitive insight. The aim of such procedures is therefore to produce within the mental continuum qualities such as faith, love, and compassion that are focused upon and cultivated (*Great Treatise*: [71]).

The *Great Treatise* is therefore considered to be an all-inclusive guide to training individuals in the path to full Buddhahood (*rdzogs pa'i sangs rgyas*). Each section describes the necessary meditative cultivations for proceeding in a gradual manner. The first section of the text lays out the manner of relying on the teacher (*bla ma*), which the Tibetan Buddhist tradition regards as an indispensable figure in a being's spiritual development and who is considered the root of the path (*lam gyi rtsa ba*). The rest of the text focuses on the stages of training one's mind. This basically consists of coming to understand the rare and precious opportunity that human rebirths provide for reaching Buddhahood and then the way in which one develops that opportunity into the occasion for full awakening

for the benefit of all sentient beings. The manner of actualizing the precious human rebirth for Buddhahood is encapsulated within a schema outlining three types of spiritual capacity: training the mind in the stages of the path in common with individuals of small capacity (*skyes bu chung*), mental training in the stages of the path in common with individuals of moderate spiritual capacity (*skyes bu 'bring*), and mental training in the stages of the individual of great spiritual vision or capacity (*skyes bu chen po*).

Training the mind in the stages of the path in common with individuals of small capacity (*skyes bu chung*) consists of spiritual exercises designed to motivate a reader away from the concerns of the present life and encourage the seeking out forms of higher rebirth through Buddhist spiritual practice. These exercises include contemplating death and impermanence (*'chi ba mi rtag pa*), the sufferings of the lower realms of existence (*ngan 'gro' sdug bsngal*), taking refuge in the three jewels of Buddha, Dharma, and Sangha, and generating conviction in the karmic principles of cause and effect.

The second mental training articulates the stages of the path in common with individuals of moderate spiritual capacity (*skyes bu 'bring*), who, on the basis of disenchantment with cyclic existence, strives for their own liberation from cyclic existence. These cultivations focus on the four truths of the Noble One, the Buddha.[13] That is, the inherent suffering in cyclic existence (*saṃsāra*), of how cyclic existence is perpetuated, the nature of its cessation, and training in the actualization of the truth of the path that leads to cessation. The truth of the path is subsumed under the three trainings (*bslab pa gsum*) of morality (*tshul khrims*), concentration (*ting nge 'dzin*), and wisdom (*shes rab*).

The third mental training consists of the stages of the path for the individual of great spiritual vision or capacity (*skyes bu chen po*) who, by way of the path of the perfections and tantra, strives for omniscient and compassionate Buddhahood, "in order to extinguish all the sufferings of all living beings" (*Great Treatise*: 131 [87]). The text elaborately details the manner of producing, cultivating, and actualizing the altruistic mind for awakening (T: *byang chub sems skyed*, S: *bodhicittodpāda*), which is considered the entrance gate (*'jug sgo*) to the Mahāyāna path of bodhisattvas. The *Great Treatise* then describes the manner of training in mental purification having generated that mind.

The cultivation of the altruistic mind for awakening entails both training for the welfare of other beings and developing one's own mental continuum with awakened qualities. Training for other's welfare includes such practices as generating universal equanimity, love, and compassion for all beings and cultivating the exchange of one's self with others (*bdag gzhan mnyam brje*). The practices that develop awakened qualities within one's own mental continuum consist in the training of the six perfections (*phar phyin drug*). That is, the trainings in generosity (T: *sbyin pa*, S: *dāna*), ethical discipline (T: *tshul khrims*, S: *sīla*), patient forbearance (T: *bzod pa*, S: *kṣānti*), energy (T: *brtson 'grus*, S: *vīrya*), concentration meditation (T: *bsam gtan*, S; *dhyāna*), and discriminative insight or wisdom (T: *shes rab*, S; *prajñā*). The later two perfections, meditation and insight, are

treated in long and extensive sections of the *Great Treatise*. The section on insight is often commented on often as a separate independent text entitled *Great* [Treatise on] *Insight* (*lhag mthong chen mo*). It is within Tsong-kha-pa's exegesis on the perfection of patient forbearance that the countermeasures against anger will be discussed.

### *Antidotes and afflictions*

Tsong-kha-pa states that in order to eliminate mental afflictions one must undertake the path of the three trainings (*bslab pa gsum*): ethical discipline (*tshul khrims*), concentration (*ting nge 'dzin*), and wisdom (*shes rab*). The training in ethical discipline is considered the basis of all good qualities (*Great Treatise*: [6]). It is the preeminent cause of achieving rebirths in realms of happiness ([204]) and provides the foundation for the trainings of concentration and wisdom. In brief, the training in ethical disciplines consists in restraining negative activities (*nyes spyod sdom pa*) through upholding the vows of individual liberation (*so sor thar ba'i sdom pa*), bodhisattva vows, and Vajrayāna vows, gathering virtuous qualities (*dge ba chos bsdus*), and accomplishing the welfare of living beings (*sems can don byed*). The training in concentration refers to cultivating bodily and mental calm that enables the mind to attain tranquility (*zhi gnas*), a state of non-discursiveness (*mi rtog pa*), clarity (*gsal ba*), and delight (*dga'*). This includes such exercises as the four meditative stabilizations (*bsam gtan*), the development of mindfulness (*dran pa*), and the meditative procedures for avoiding the excesses of laxity (*bying ba*) and agitation (*rgod pa*). The culmination in the training of concentration provides the mental continuum with the stability and pliancy to focus the mind on any subject for an extended period of time. This training serves for Tsong-kha-pa as the necessary prerequisite to the training in wisdom. The training in wisdom consists in cultivating the insight (*lhag mthong*) that properly discerns the lack of self or essence in things and persons. The proper training in wisdom severs the roots of cyclic existence and mental afflictions by eliminating the ignorance that grasps at an intrinsically existing self.

In the context of the proper cultivation of insight, Tsong-kha-pa places importance on the valid means of knowledge (*tshad ma*), reasoned knowledge (*rig shes*), and cognitive ascertainment (*nges pa*). While the details of these factors within Tsong-kha-pa's path system and his understanding of Madhyamaka ("middle way") philosophy are beyond the scope of this chapter, we will note several features relevant to the topic at hand. Tsong-kha-pa notes that there are two types of objects to be negated: – the objects negated by the path and the objects negated by reason ([651]). The objects negated on the path are mental afflictions and cognitive obscurations that are abandoned while implementing the practice of the path-exercises of ethics, mental cultivation, and insight. The object negated by reason primarily refers to intrinsic or inherent nature (*rang bzhin*). For Tsong-kha-pa, a state of awareness that erroneously superimposes intrinsic natures upon things and persons is the fundamental mental affliction that perpetuates

karma and cyclic existence. In this regard, the *Great Treatise* (206 [654]) states that "what is this delusion like? It is ignorance, which in this context is an awareness that mistakenly superimposes intrinsic nature; it apprehends internal and external things as existing by way of their own intrinsic nature."

Later in the text, Tsong-kha-pa elucidates the relationship between the misconception of ignorance and cyclic existence in the following manner:

> This cyclic flow of birth and death arises from karma. Only physical, verbal, and mental compositional activity associated with an afflicted mind constitutes karma that established cyclic existence, so karma arises from afflictions. Afflictions that are rooted in the reifying view of the perishing five aggregates[14] do not arise without the operation of misconceptions that superimpose upon indications such as pleasant and unpleasant. Thus, afflictions such as attachment and hostility, rooted in the reifying view of the perishing aggregates, are produced from such misconceptions. These misconceptions operate mistakenly only by clinging to the notion, "This is real," in regard to the eight worldly concerns, or men or women, or pot, cloth, form, or feeling. Since it is these misconceptions that conceive these objects, they are generated from the elaboration of conceptions of true existence.
>
> (321 [764])

Tsong-kha-pa advocates the utilization of reasoned knowledge and analytical procedures to counteract misconceptions of true or intrinsic existence and their derivative mental afflictions. In brief, reasoned knowledge or reasoning consciousness (*rigs shes*) is a type of certainty that recognizes things as they are. In order to stop erroneous consciousness (*phyin ci log*), one must first refute the object that consciousness apprehends. So, for instance, a reasoning procedure that analyses how things arise due to causes and conditions (as dependent-arisings) will refute one's misconstrual that the experience of something pleasurable or unpleasurable is permanent (*Great Treatise*: 204 [652]). Reasoning consciousness has its sphere of authority in analyzing whether or not objects of knowledge have some sort of ultimate ontological or substantial existence. For Tsong-kha-pa, nothing can withstand this type of analytical reasoning and therefore things and persons lack substantial existence. However, "a reasoning consciousness that accurately analyzes whether something intrinsically exists does not contradict that which exists conventionally" (*Great Treatise:* 179 [628]). Things and persons do exist, but they exist in a conventional manner, that is, as a causal series of dependent-co-arisings imputed by a being's mental continuum and acknowledged through common social consensus. Things and persons are thought to exist *like* illusions in that they lack substantial existence, yet they are not the same as illusions, mirages, dreams, and so forth in and of themselves as they are dependent-co-arisings subject to karmic effects of causes and conditions. Therefore, for example, an illusory-like person may suffer an illusory-like headache.

The headache is temporary, non-substantial, and lacks intrinsic existence, yet it still functions to provide a human's cerebral region with discomfort and pain. A remedy or antidote, such as aspirin, may be applied to dissipate the headache. The remedy also lacks intrinsic existence and is illusory-like, yet still functions to lessen the headache. Likewise, for Tsong-kha-pa, illusory-like negative mental states and the erroneous states of consciousness that give rise to them can be replaced and remedied through analytical procedures. As Tsong-kha-pa states (*Great Treatise*: 204 [652]): "We carry out refutations with excellent reasoning so as to stop inaccurate and mistaken conceptions; proof by reasoning is a technique for developing accurate and certain knowledge." In this context cognitive ascertainment of selflessness through reasoning cancels and replaces the mind that reifies. Tsong-kha-pa elaborates in this regard that:

> Ignorance superimposes an intrinsic nature on things; from this, attachment, hostility, and so forth arise, further superimposing features such as attractiveness or unattractiveness upon that intrinsic nature. Therefore, reason can also be used to eradicate the way that attachment and such apprehend objects.
>
> (*Great Treatise*: 183 [632])

In the utilization of reasoning for cognitive ascertainment, Tsong-kha-pa's system is based on what we might term an "antidote" model. The proper use of reasoning enables erroneous conceptual minds to be removed and replaced with accurate ones. Analytical procedures such as these have to be repeatedly cultivated and occur in advanced stages of practice.

Nevertheless, Tsong-kha-pa also construes earlier phases of the path to awakening along the lines of the antidote model in which there is a struggle of "wholesome" conceptual consciousnesses against "unwholesome" ones. In this context one becomes knowledgeable in distinguishing what are virtuous mental states as opposed to non-virtuous mental states, and repeatedly examines one's own mental continuum to identify primary and secondary afflictions, and through identifying them one can immediately apply the antidote and overcome the afflictions when they arise. Tsong-kha-pa (*Great Treatise*: 237) quotes the oral tradition of Gön-ba-wa (*dgon-pa-ba*) on this type of cultivation:

> To eliminate afflictions, you must know the afflictions' faults, their characteristics, their remedies, and the causes for their arising. After you have recognized their faults, regard them as defective and consider them enemies. If you do not recognize their faults, you will not understand that they are enemies . . . Once you know the primary and secondary afflictions, then when any attachment, anger, and such arises in one's mental continuum, one can identify it, thinking, "This is that; now it has arisen" and fight the affliction.[15]

In this phase of Tsong-kha-pa's path system, eliminating negative mental afflictions entails that one must have an understanding of the afflictions' characteristics, causes for their arising, and remedies for the countermeasures against them. Once negative mental afflictions such as attachment, anger, and so forth arise in one's mental continuum, one can identify it, thinking, "This is it." Then by examining the causes and conditions which produced the afflicted mental state and the object of observation to which it is related, one can then overcome it with its proper antidote or counter-agent mental state.

As writers on comparative psychology have noted, this basic paradigm of replacing afflictive mental states with healthy mental factors is similar to that of cognitive psychotherapy. Here, the practitioner becomes aware of unhealthy mental factors, such as attachment and jealousy, and consciously substitutes the reciprocally inhibiting healthy opposite factor. The way in which one cultivates patient forbearance to replace the negative mental affliction of anger will be examined later.

In this context, afflictions are thought to be temporal mental qualities that once correctly identified and removed, cannot return to the mental continuum.[16] Along these lines, Tsong-kha-pa states:

> When you rout ordinary enemies, they can take over another country, seize power, and then return again to challenge you. The afflictions are not like this. Once you expel them completely from your mind, there is no other country to which they can retreat; nor can they return.
>
> (2000: 348 [276])

Afflictions are therefore removable from the mental continuum and able to be eradicated. Tsong-kha-pa (*Great Treatise:* [233]) describes the general characteristic of afflictions based on the *Abhidharmasamuccaya* as follows:[17] "This is the definition of an afflicted mental state: it arises with the characteristic of perturbation (*rab tu ma zhi ba*), and arising in that fashion, it perturbs the mental continuum."

Mental states that perturb the mental continuum and provided the impetus for non-virtuous or unwholesome actions are classified as afflictions. Tsong-kha-pa defines ten primary afflictions in his *Great Treatise* (298–300 [233–234]): attachment (T: *'dod chags*, S: *rāga*), anger (T: *khong khro*, S: *pratigha*), pride (T: *nga rgyal*, S: *māna*), ignorance (T: *ma rig pa*, S: *avidyā*), doubt (T: *the tshom*, S: *vicikitsā*), false view that the perishable aggregates constitute a real self (T: *'jig tshog la lta ba*, S: *satkāyadṛṣṭī*), extreme views (T: *mthar lta*, S: *antargrāhadṛṣṭī*), the belief that wrong views are supreme (T: *lta mchog 'dzin*, S: *dṛṣṭiparāmarśa*), the belief that ethics and ascetic vows are supreme (T: *tshul khrims dang brtul zhugs mchog 'dzin*, S: *śīlavrataparāmarśa*), and wrong views (T: *log lta*, S: *mithyādṛṣṭīi*).

The afflictions develop from the misapprehension or false view that the perishing psychophysical continuum of the aggregates is composed of a self. Tsong-kha-pa

states (*Great Treatise:* 300 [235]) in this regard that:

> When the view of the perishing aggregates apprehends a self, discrimination arises between self and other. Once you have made that distinction, you become attached to what is associated with yourself and hostile toward that which pertains to others. As you observe the self, your mind also becomes inflated. You develop a belief that this very self is either eternal or subject to annihilation. You come to develop a belief in the supremacy of a view of the self and the like, and you also come to believe in the supremacy of the detrimental practices associated with such views.

Jey Rimpochey's path system of mental cultivations and spiritual exercises are oriented toward bringing this self-grasping to an end. Among afflictions other than ignorance, he considers anger to be particularly detrimental. Tsong-kha-pa (*Great Treatise*: [233]) defines anger in the following manner: "Anger (*khong khro*) is malevolence in relation to objects such as sentient beings, suffering, and bases of suffering such as weapons, etc. It is an abusive mind that intends to harm those objects."

We now turn our attention to Tsong-kha-pa's techniques for countering anger in the context of developing the capacity for patient forbearance (*bzod pa*).

### *Antidotes to anger*[18]

Tsong-kha-pa's guidelines for cultivating the antidotes to anger are described in the *Great Treatise's* section on the perfection of patient forbearance (*bzod pa*). Tsong-kha-pa (*Great Treatise*: [397]) defines the nature of patient forbearance as follows: "[The nature of patient forbearance] does not give thought to another's harm-doing, accepts the arising of suffering within one's own mental continuum, and is firmly involved with ascertaining the doctrine (*dharma*)". Based on this definition, Tsong-kha-pa understands patient forbearance to be an interior mental quality that is developed within one's own mind and is not contingent upon changing other people's behavior or other external circumstances. The mental cultivation of the perfection of patient forbearance consists just in the perfect fulfillment of the mind's proficiency in ceasing one's own anger and does not depend upon freeing all sentient beings from their wicked ways. The essential point to cultivating patient forbearance is achieved by taming one's own mental continuum. Tsong-kha-pa's (*Great Treatise*: [397]) understanding of anger as an interior mental state to be cultivated reflects the Indian Buddhist scholar Śāntideva's statements in the *Bodhicaryāvatāra* (5.12–14):

> How many wicked people, as [unending] as space, can I kill? But when the mental-state of anger is slain, then all enemies are slain. Where would there be leather enough to cover the entire world? The earth is covered over merely with the leather of my sandals. Likewise, I am unable to control external things, but I shall control my own mind. What need is there to control anything else?

Tsong-kha-pa advocates that one should use all sorts of meditative techniques and procedures to increase familiarity with patient forbearance. The goal is the enhancement of one's capacity for tolerance in counteracting negative mental forces such as anger. Among such mental techniques, Tsong-kha-pa initially discusses the mental cultivation of understanding the benefits of patient forbearance, recognizing the faults of impatient non-forbearance, and developing awareness for the gravity of anger both in this life and in future lives. In the classical Tibetan Buddhist worldview in which Tsong-kha-pa wrote, not only does the generation of anger have immediate consequences, but it can lead to undesirable forms of existence in future lives. Regarding the technique of reflecting upon the benefits of patient forbearance, Tsong-kha-pa (*Great Treatise*: [398]) cites the *Bodhisattvabhūmi*:

> The bodhisattva first of all views patient forbearance as beneficial and thinks, "The person who has patient forbearance in the future will not have many enemies and will not have many divisions, will have much happiness and satisfaction, will not have regret at the time of death, and with the perishing of the body will take rebirth among the gods in the realms of the upper happy heavens." In such a way, by observing the benefit, oneself engages in patient forbearance and moreover, through correctly apprehending patient forbearance, one will proclaim and praise patient forbearance, having a happy heart when seeing a patient person, and always be happy.

Tsong-kha-pa then goes on to list the many benefits of patient forbearance. Patient forbearance enables a person to persevere in helping other beings despite their ingratitude. One becomes protected from anger, from being tormented by mental afflictions, and performing acts of malevolence. Cultivation of patient forbearance also has physical effects in that it brings a golden complexion and beautiful form that captivates others. For Tsong-kha-pa, patient forbearance enables one to be happy all the time in this life and to avoid taking rebirth in lower realms in future lives. The cultivation on the benefits should be carried out until one gains a firm and powerful ascertainment in the cause and effect relations that occur from patient forbearance.

Jey Rimpochey understands the faults of anger to be extremely detrimental to the bodhisattva path to awakening. He cites the *Mañuśrī-vikrīḍita-sūtra* as stating that anger destroys virtues accumulated over a hundred eons and the *Bodhicaryāvatāra* (6.1) which states that "all the good conduct, such as generosity and worshiping the Sugatas (i.e. Buddhas), that has accumulated over thousands of eons, anger destroys it all."

The *Madhyamakāvatāra* also says that producing a single moment of anger towards bodhisattvas destroys virtues accumulated from practicing the perfections of giving and ethics for a hundred eons. Tsong-kha-pa analyzes these statements and relates them to the weight of the causal basis through which anger is

produced, that if a bodhisattva destroys roots of virtue through anger, how much more so is the case when a non-bodhisattva becomes angry with a bodhisattva. In whichever context it occurs, for Tsong-kha-pa, anger tremendously incapacitates virtue (see Cozort 1995).

In this way, the detrimental effects of harboring anger are manifold, for future lives as well as the present. Under the influence of anger, the mind does not experience peace nor happiness, former pleasures and joys perish, sleeplessness arises, the mind degenerates from its natural state, and one loses friends. Tsong-kha-pa (*Great Treatise*: [403]) cites the *Bodhicaryāvatāra* (6.3–5) for cultivating awareness of anger's clear and present danger to one's well being:

> One's mind does not experience peace, obtain happiness or delight, go to sleep, nor feel secure when hatred embraces a tormented mind.
>
> Those whom one honors with wealth and respect, and also one's dependents, even they wish to slay the master who has hatred.
>
> Even relatives are disenchanted with him. Even though he gives, he is not honored. In brief, there is no sense in which someone prone to anger is well off.

Tsong-kha-pa recommends cultivating a firm understanding of the faults that arise from anger. Tsong-kha-pa also notes at this point, drawing on the *Bodhicaryāvatāra* (6.2), that "There is no evil like hatred, and there is no austerity like patience." On the reason for hatred or anger being unlike any other negative affliction, Tsong-kha-pa cites the *Madhyamakāvatāra-bhāṣya* (on 3.6):

> As the quantity of water in the great ocean cannot be ascertained through measurement, the extent of the [karmic] maturation concerning [anger] cannot be ascertained. Therefore, in this way, there does not exist another misdeed greater than impatience which casts unpleasant results and harms virtue.

In other words, anger, which is closely related to impatience, is considered to have unfathomable effects in this life and in future lives and undermines all wholesome actions that one has previously cultivated. One ascertains the benefits and faults of anger and also is aware of the uncertain extent to which anger is detrimental. The next step for Tsong-kha-pa is to cultivate the capacity for patient forbearance through multiple purviews of analysis.

Tsong-kha-pa (*Great Treatise*: [405–410]) examines the inappropriateness of anger through three main avenues of analysis. First, he considers the object (*yul*), that is, others who provoke the cause of being angry, next, the subject (*yul can*), that is, one's own responsibility for the situation based on former actions, and finally, the causal basis (*rten*) from which anger may arise.

In considering the object (*yul*) (*Great Treatise*: [405–409]), one considers whether a harm-doer is acting independently or not. One examines the causes and

conditions and sees that anger against others is not appropriate because they lack an independent status of their own. That is, they are helpless against their own conditioning, the aggregation of cause and conditions infused with mental afflictions and karmic propensities, which propels them to commit acts that provoke one to anger. They are like a servant under the power of the afflictive mental states. Tsong-kha-pa likens this process to a healer who, while trying to free a patient from an evil spirit, is struck and harmed by the patient. The healer understands that the patient is not acting independently, but under the influence of other forces, and so does not become angry toward the patient but endeavors to free the patient from the evil spirit. Likewise, the bodhisattva, a person of great spiritual capacity, when struck by a harm-doer understands that one who does harm lacks autonomy and is under the influence of the evil spirit of the mental afflictions (*nyon mongs*). The bodhisattva does not become angry toward the individual but undertakes activities to help them to become free from their afflictions. Tsong-kha-pa also makes the point that beings lack autonomy because even though they themselves want happiness, they commit acts that lead to suffering.

In considering one who does harm, the *Great Treatise* ([407]) recognizes that anger is inappropriate when examining whether the fault is the essential nature (*rang bzhin*) of the one who commits the harm or is just a temporary circumstance (*glo bur ba*). If harming others is in some way an essential nature of a person, then there is no point in being angry since they cannot help the way they are. This is analogous to being angry toward a small child for being immature, cursing clouds because they produce rain, or resenting a fire because it burns. Begrudging things for possessing their essential qualities is thought to be pointless. Likewise, if harming others is not a person's essential nature, but an adventitious or temporary circumstance, then there is no point in being angry at the person who is under the influence of circumstantial conditions. This is likened to being angry at the sky when overcast with clouds. The essential nature of the sky is not to be overcast, but due to certain circumstances the sky may be covered with clouds.

The (*Great Treatise* [407]) also considers the inappropriateness of anger at a harm-doer from examining the direct (*dngos*) or indirect (*brgyud*) factors that gave rise to an injurious act. From one perspective, a person should direct anger at the factor that directly causes the pain. On the other hand, one could direct anger at the indirect or underlying factor that gave rise to the act. From this perspective one should direct their anger at hatred, since it would be the underlying motivating factor, as the person is but the instrument of the hatred. Therefore, as in the previous analysis that revealed a harm-doer's lack of autonomy, a person is only indirectly responsible for provocation; s/he is being used by hate in the same way that a person uses a weapon. Here, one should oppose the negative mental afflictions, rather than the person. The *Bodhicaryāvatāra* (6.41–42) states in this regard:

> If, disregarding the direct cause, such as a stick or other weapon, I become angry with the wielder, then, since he too is secondary, being incited in turn by hatred, it is better that I be angry with the hatred.

The last point that Tsong-kha-pa considers is (this from the perspective of the object), in terms of how it is inappropriate to be angry when examining the cause that urges the harm-doer. The suffering induced by a harm-doer does not arise without a cause nor does it arise from a cause that is not concordant with the harmful action. Accordingly, harm must arise from a corresponding cause: one's own past non-virtuous actions. Infuriating people are not independent agents, but rather are agents of one's own previous non-virtuous actions.

In terms of the subject (*yul can*), Tsong-kha-pa (*Great Treatise*: 409–410) encourages reflection upon the detrimental effects that will occur if one responds to harm-doing with anger. One should reflect "I am behaving foolishly" and endeavor to not let anger take over one's mental stream. Since the suffering produced by harm is the result of former non-virtuous actions, experiencing the suffering is thought to purify and consume former negative actions. If one cultivates patient forbearance and withstands suffering, one does not amass any new unwholesome transgressions and greatly expands one propensity for meritorious and wholesome experiences. Therefore, one should view the harm-doer with kindness, looking beyond the damage they are doing to themselves, and perceive the harm-doer as engaging in the purification of one's own transgressions. In this instance, a provocative person gives one the opportunity to amass merit and is beneficial for spiritual progress. Tsong-kha-pa cites Candrakīrti's *Madhyamakāvatāra* (3.5) on this point: "the result of previous non-virtuous deeds is itself called the destroyer [of non-virtuous karma]. How could one sow the seeds of suffering through anger and harm to another?"

Therefore, Tsong-kha-pa advocates that just as one would tolerate (*bzod pa*) bleeding and the burning of moxibustion as a means to healing a great sickness, likewise the most appropriate course of action is to tolerate or have patient forbearance with regard to minor suffering in order avert the potential greater suffering of unfortunate lower rebirths or negative karmic repercussions.

Tsong-kha-pa's analysis of the inappropriateness of anger concludes by briefly examining the causal basis (*rten*) from which anger may arise (*Great Treatise*: [410]). This analytical cultivation examines who is ultimately to blame and who is guilty as the source of harm. Tsong-kha-pa cites *Bodhicaryāvatāra* (6.43–44, 67) in this context:

> Both his weapon and my body are the causes of suffering. He gave rise to the weapon and I to the body. At which is there anger?
>
> Blinded by attachment I grasp this sore of a human form, which cannot bear to be touched and is suffering, with whom should I be angry when it is hurt?
>
> Some commit offenses out of delusion. Others, deluded, are angry. Who among them is free from blame? Which one is guilty?

Tsong-kha-pa is stating that we are inclined to suffering and dissatisfaction so long as we remain overly attached to the psychophysical aggregates that are

the product of our karma and mental afflictions. The occurrence of pain and its potential derivatives such as anger arise through a combination of various factors and conditions.

## Summary

Tsong-kha-pa understands anger to be a destructive force in this life and in future lives. His presentation is infused with and guided by the assumptions of suffering and pleasure correlated to wholesome or unwholesome actions causally connected over numerous lifetimes. In this worldview, anger incapacitates virtues, serves as an obstacle to the development of patient forbearance, and ultimately inhibits one's ability to help others. At the same time, Tsong-kha-pa also assumes that the mental continuums of human beings are endowed with luminosity and clarity. Humans have the ability to overcome and avoid negative mental propensities such as anger through cultivating wholesome mental qualities and engaging in reasoning as a spiritual exercise. Cultivating wholesome or virtuous qualities are casually connected with beneficial states of existence and serve as antidotes to afflicted mental states. Reasoning is applied in order to gain cognitive ascertainment of the lack essence in things and persons. This type of ascertainment is thought to lessen self-grasping and its resultant negative mental conditioning.

In this way, Tsong-kha-pa's presentation contains several important elements in attempting to overcome anger. The cultivations initially provide a developed appreciation for the negativity of anger. Tsong-kha-pa's spiritual exercises on the inappropriateness of anger demonstrate how the mind may be cultivated to analyze the underlying causal factors of anger's occurrence. Countermeasures such as these condition the mind against the mental affliction of anger and allow for the mind to increases its capacity for patient forbearance (*bzod pa*).

## Notes

1 On the life of Tsong-kha-pa see E. Obermiller, "Tsoṅ-kha-pa le pandit" in *Mélanges chinois et bouddhiques* 3 (1935): 319–338, R. Thurman (ed.), *The Life and Teachings of Tsong Khapa* (Dharamsala 1982) and R. Kaschewsky, *Das Leben des lamaistischen Heiligen Tsongkhapa Blo-bzaṅ-grags-pa* (Wiesbaden 1971).

2 Ruegg (1980: 278; 2000: 3–7) distinguishes four periods in the development of Buddhism in Tibet: (a) preliminary assimilation (eighth–ninth centuries), the early propagation (*snga dar*): (b) full assimilation (tenth–fourteenth centuries), during which doctrines were systematized; (c) the classical period (fourteenth–sixteenth centuries); and (d) the scholastic period (sixteenth–twentieth centuries), during which textbooks were systemized in an effort to reach definitive exegesis of previous interpretations.

3 I have used throughout this essay, unless otherwise noted, the English translation of the Lamrim Chenmo Translations Committee's (Cutler, editor-in-chief) *The Great Treatise on the Stages of the Path to Enlightenment*, volumes one and three (Snow Lion, Ithaca, NY: 2000, 2002) and the 1985 Tibetan edition with the title *Byang chub lam rim che ba* published by Tsho Ngön (*mtsho sngon*) People's Press based on the Bya khyung block prints. My translation of the Tibetan is followed by square bracketed references

to the Tibetan edition page number and numbers given in parentheses refers to the English translation of Cutler *et al*.

4 Tsong-kha-pa explains these concepts as being synonymous in his *Sde bdun la 'jug pa'i sgo don gnyer yid kyi mun sel*.

5 Tsong-kha-pa notes the purity of the basic nature of the mind in his *Elucidation of the Thought* (*dgongs ba rab gsal*). See Hopkins 1980: 132–133. The luminous nature of mind in terms of its emptiness of intrinsic existence is found in the *Legs bshad gser phreng* (1986: 339–340): *de nas dbu ma pa ni sems kyi rang bzhin gshis la cir yang ma grub pa'i stong nyid de rtogs pa na*.

6 AS (1950: 5–6): *cetanā katamā/cittābhisaṃskāro manaskarma/kuśalākuśalāvyākṛteṣu cittaprarenakarmikā*.

7 AK, 4.1cd (1975: 192): (*karmajaṃ lokavaicitrayaṃ/*) *cetanā tatkṛtaṃ ca tat / cetanṃ mānsaṃ karma/tajjaṃ vākkāyakarmaṇī*.

8 Louis de la Vallée Poussin, trans, *L'Abhidharmakośa de Vasubandhu*, Bruxelles: Institut Belge des Haustes Etudes Chinoises, 1971, III.106. Cited by Dreyfus (1995: 42; 2002: 39).

9 Translation based on Apple and Dunne (2001). *Great Treatise* (210–211 [159]).

10 *Ratnāvalī* 1.21: *aśubhāt sarvadu, khāni sarvā durgatayas tathā/śubhāt sugatayaḥ sarvāḥ sarvajanmasukhāni ca* // Hahn, 1982: 10; Dunne/McClintock, 1997: 14.

11 In Tsong-kha-pa's understanding of Sāṃkhya theism, the world is created out of "fundamental nature" (*rang bzhin, prakṛti*), also known as "primal essence" (*gtso bo, pradhāna*), by the supreme deity Īśvara (*dbang phyug*).

12 Pierre Hadot (1995). See also McClintock 2002: 3.

13 The initial teachings of the Buddha are commonly known as "the four noble truths." However, the term "noble" refers to how things "are seen by a Buddha, how things really are when seen correctly" (Williams 2001: 41). In this sense, they are "the truths of the nobles" or "the truths of, possessed by, the noble ones" (Norman 1993 volume: 174). Tsong-kha-pa concurs with this understanding as he articulates in the *Legs bshad gser phreng* (1986: 188–189) that the "truths of the noble ones' (*'phags pa'i bden pa rnams*) are based on noble beings" (*'phags pa*) meditative transformation and cognitive insight.

14 False view of the perishing five aggregates (S: satkāyadṛṣṭi, T: *'jigs tshog la lta ba*) is a technical term for the afflicted discernment that grasps onto the idea of "I" and "mine" when perceiving the fluctuating and transitory five aggregates. Tsong-kha-pa explains in the (*Great Treatise* [234]) that: . . . since "perishing" means impermanent and "collection" (i.e. the aggregates) means manifold, the locus of this view is merely an impermanent and manifold thing; nevertheless, one applies the term "false view that the perishable aggregates [constitute a Self]" for the purpose of teaching that "a permanent and unitary individual does not exist." (. . . *'jig pa ni mi rtag pa dang tshogs pa ni du ma yin pas 'dis gang la lta ba'i gzhi ni mi rtag pa dang du ma'i chos tsam yin gyi/rtag pa dang gcig pu'i gang zag ni med do/zhes bstan pa'i phyir du 'jig tshogs la lta ba zhes ming btags so*.)

15 *Great Treatise* ([237]) translation based on Apple and Dunne (2001).

16 See *Bodhicaryāvatāra*: Even if banished, an enemy may acquire retinue and support in another country, and return from there with gathered strength. But there is no such resort for this enemy, the afflictions. Based in my mind, where might it go once cast out? Where might it stay and work towards my destruction? I make no effort simply because my mind is dull. The afflictions are weaklings to be subdued by the eye of wisdom. BCA (4.45–46): *nirvāsitasyāpi tu nāma śatror deśāntare sthānaparigrahaḥsyāt/ yataḥ punaḥ saṃbhṛtaśaktir eti na kleśaśatror gatir īdṛśī tu* // 45 // *kvāsau yāyān manmanaḥ stho nirastaḥsthitvāyasmin madvadhārthaṃ yateta / nodyogo me kevalaṃ mandabuddheḥ kleśāḥ prajñādṛṣṭisādhyā varākāḥ* // 46 //.

17 AS (Rahula, 70; Pradhan, 43): *yo dharma utpadyamāno 'praśā ntalakṣaṇa utpadyamā nena yena kāya cittaprabandhāpraśamapravṛttiḥ/idaṃ kleṣalakṣaṇam*.

18 This section is based on the Tibetan version of the *Great Treatise*: [397–425] All citations of the *Bodhicaryāvatāra* and other Indian texts are from the Tibetan as found in the 1985 Tibetan version of the *Great Treatise*. Tsong-kha-pa also discusses anger in his *Elucidation of the Thought* commentary for which see Hopkins (1980: 204–222) and Cozort (1995). Wayman has translated this section in his *Ethics of Tibet* (1991: 143–170). The Lamrim Translation Committee's version of this section of the *Great Treatise* (volume 2) has not been published as of this writing. Cozort's " 'Cutting the Roots of Virtue:' Tsongkhapa on the Results of Anger" (1995) focuses on exegetical matters of Tsong-kha-pa's understanding of anger, but does not extensively discuss Tsong-kha-pa's countermeasures against anger.

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# 14

# WESTERN SCIENCE MEETS EASTERN WISDOM TO EXPERIENCE BODILY FEELINGS

*Michael S. Drummond*

> This body . . . is old kamma, to be seen as generated and fashioned by volitional forces, as something to be felt.
>
> (The Buddha in the Saṃyutta Nikāya[1])

> And how, bhikkhus, does a bhikkhu abide contemplating feelings as feelings? Here when feeling a pleasant (or unpleasant or neutral) feeling, he understands: 'I feel a pleasant (or unpleasant or neutral) feeling' . . . with mindfulness that 'there is feeling' simply established in him . . . he abides independent, not clinging to anything in the world.
>
> (The Buddha to his monks in the Satipaṭṭhāna Sutta[2])

This chapter addresses the similarities between how Humanistic psychology's Experiential psychotherapy, as represented by E. T. Gendlin's Focusing technique, and Nikāyan[3] Buddhism both understand the role played by affective bodily feelings in cognition. Both posit that a true understanding of affective bodily feelings can lead to the deconstruction of destructive emotional habits. Here I first examine the doctrinal underpinnings of how Nikāyan Buddhism understands the arising of feelings. Then the chapter looks at aspects of how the Vipassana meditation master S. N. Goenka teaches the Nikāyan mindfulness practice of the observation of feelings (*Vedanānupassanā*). Next I examine the philosophical structures underpinning Gendlin's Focusing and the Focusing technique itself. The chapter then draws conclusions and notes the implications of the convergences of these two approaches.

## The preconceptual mind, affect and dependent origination

The model of dependent origination is an extremely important tenet in the Pāli language 'suttas' or discourses of 'Nikāyan' Buddhism. Factors 5 through 9 of the standard 12-factored model of dependent origination are perhaps

the most critical as they outline the emotional-cognitive nature of human experience, which includes a framework for the arising and cessation of mental afflictions.

The Pāli suttas however state that the theory or model of dependent origination occurred to the Buddha as a result of his awakening, of which the four categories of *satipaṭṭhāna* mindfulness meditation were of paramount importance. Of interest to this chapter is the observation of feeling (*Vedanānupassanā*) the second category of *satipaṭṭhāna* which is explained in the discourse on the four Establishings of Mindfulness (Satipaṭṭhāna Sutta: MN.1.55).[4] In the Honeyball Sutta of the Majjhima Nikāya (MN.1.111–112) there is a passage that includes a portion of the dependent origination model beginning with the fifth factor (of the standard, 12-factor model),[5] the six sense base (*saḷāyatana*), the eyes, ears, nose, tongue, body and mind.

This passage states that 'dependent on the eye and forms, eye-consciousness arises, the meeting of the three is contact' (*phassa*). 'Contact' is the sixth factor of dependent origination and therefore the basic unit of sense cognition. The passage then instructs 'with contact as a condition there is feeling'. Feeling then is the seventh factor of dependent origination. The passage then explains 'what one feels (*vedeti*), that one perceives' (*sañjānāti*). Importantly, all this is happening in a sequential order. Finally, the passage explains 'what one perceives, that one thinks (*vitakketi*)[6] about. What one thinks about, that one mentally proliferates' (*papañceti*).

What the suttas explain is that first, the noun form of the term '*sañjānāti*', which is '*saññā*' is seen as conjoined, and it cannot be disjoined, with feeling (MN.1.293) and that it has the function of perceiving the differences between shapes, sounds, colors, etc. (Ibid.).[7] Thus it can be understood that it is after *saññā/sañjānāti* that craving (*taṇhā*), factor eight of dependent origination, arises.[8] This indicates that '*vitakketi*' and '*papañceti*' have been superimposed, in spatial terms, upon the positions held by the two factors that normally follow the contact-feeling process, 'craving' and 'attachment' (*upādāna*),[9] the ninth factor of dependent origination. The arising of craving and attachment is of course the arising of *dukkha*[10] which is to say, the arising of mental afflictions. This superimposition then appears as a method of implicitly equating, at the temporal level, the arising of the afflictive emotions of craving and attachment with the arising of the discursive conceptualizations. If so, this would be an emotion-cognitive model of sense cognition indicating that these two, craving and attachment arise separately with thoughts following a bit slower on the heels of the contact-feeling process then how craving follows on the heels of the same contact-feeling process.[11] In short this passage offers a model of how feelings function in cognition; it reads as follows:

> Dependent on the eye and forms, eye-consciousness arises. The meeting of the three is contact. With contact as a condition there is feeling. What one feels, (*vedeti*), that one perceives (*sañjānāti*). What one perceives,

> that one thinks (*vitakketi*) about. What one thinks about, that one mentally proliferates (*papañceti*)
>
> (MN.1.111–112, translation by Ñāṇamoli and Bodhi 1995)

This passage of sequential relationships then understands the arising of thought to be directly equated with the activation of the conscious level of the mind because thought only arises after the two factors of contact and feeling. Therefore, contact and feeling are performing their respective functions at a preconceptual level. Importantly, the suttas see a separate 'unit' of feeling, which can be of a pleasant, unpleasant or neutral affective/evaluative quality, arising with each contact[12] at any one of the five bodily sense faculties as well as the mind sense faculty (MN.3.285).

This Nikāyan model appears superficially simple but quickly leads to a multi-dimensional view of emotional-cognitive phenomena. As noted, feeling arises with each sense contact (*phassa*) with an external object, which includes thought. This sequence can go through to a full discursive strategizing, if not interrupted by another more powerful sense contact and feeling.

Turning to the eighth and ninth factors of craving and attachment, both have the same nature of attraction or aversion towards the sense object. They then play a key role in the Nikāyan system because they are representative of the whole spectrum of emotional behaviour from the subtlest desire to the grossest anger. The system is further developed by how it defines the speed of sense contact. The Abhidhamma texts argue for a rapid, and continual arising and passing away of the basic contact-feeling process. The canonical Abhidhamma notes that consciousness, based on contact, arises for a moment and just as quickly falls away and is directly followed by another contact. Each contact arises with focus on only one sense object, while there are numerous contacts in one second (Gethin 1998: 211). This view probably has its roots in sutta statements such as the Nikāyan principle that says 'no other thing so quickly changes as the mind and it is no easy thing to illustrate how quick to change it is' (AN.1.10, SN.2.94–95). This of course does not exclude an object from taking a central position in one's conscious continuum over an extended period of time. Nevertheless, as each contact conditions the immediate arising of a feeling, we can assume that the great bulk of a non-awakened person's affective experience as being at the preconceptual and usually unconscious level.

### *Bodily feelings, mindfulness and the satisfied mind*

The Nikāyas see attachment to affective feelings as that which leads to intentional reactions of desire or aversion; this as per factors 5 through 9 of dependent origination's analysis of the arising of *dukkha*. Such attachment then is the basis of mental afflictions, but interdependently, mental afflictions are also the basis of further attachment.[13]

As implied earlier, Nikāyan principles view each sense contact and its conditioned feeling as tending to strengthen or deepen the afflicted nature of

the personality. In addition the Nikāyan view of emotion is feeling-dependent and it sees this feeling in any non-awakened, or perhaps non-practitioner of mindfulness or concentration meditation, as almost automatically causing *taṇhā* (craving), and thus mental afflictions, to arise. Such mental afflictions as shown in the suttas can be seen as causing a division on the personality. The feeling-*taṇhā* process, even if a more powerful contact-feeling process intervenes, becomes integrated with and so strengthens one's volitional formations (*saṅkhāra*).[14]

The Nikāyas are primarily a descriptive/prescriptive document of the causes and eradication of mental afflictions. In terms of mindfulness of feelings as a therapeutic technique for the eradication of the afflicted volitional forces and formations, a passage from the Saṃyutta Nikāya explains that:

> Just as many diverse winds blow back and forth across the sky . . . so in this very body . . . various kinds of feelings arise, pleasant ones, and unpleasant ones, and those neither unpleasant nor pleasant. Having fully understood feelings in their entirety, the practitioner is awakened in this very life
>
> (SN.4.218, translation adapted from Bodhi 2000)

Reflecting on the *satipaṭṭhāna* practice, this is a clear canonical reference that the practice of the observation of affective feelings is of feelings *on or in* the body. Moreover, mindful observation of them as taught in the Satipaṭṭhāna Sutta gradually dissolves the volitional forces and formations, ultimately resulting in full purification of the mind from mental afflictions and awakening. This is seen by the texts as happiness perfected, a complete and full satisfaction of the mind. For understanding the practice of the mindful observation of feelings, I would now like to give a short analysis of how the Nikāyan practice of the observation of feelings is taught by S. N. Goenka.

## S. N. Goenka, emotive feelings and the systematic scanning of bodily feelings

The Nikāyan practice of the observation of feeling is taught, most notably, by the Vipassana Meditation master, S. N. Goenka.[15] In his 10-day residential Vipassana course Goenka very emphatically connects the practice of the observation of the feelings to the feelings on the body which he terms 'sensations'. He further asserts that it takes a minimum of 10 days to grasp what he sees as a thoroughly holistic technique of observing the bodily feelings.

As for the function of the bodily feelings, he urges that they are, at all times, in contact with the mind at its deepest level and that all external sense objects, 'when they come in contact (*phassa*) with the sense doors, create a sensation'. Moreover, he holds that the mind, at its innermost core, is primarily occupied with

experiencing bodily feelings and as such, 'keeps on reacting day and night' (Goenka 2000a: day five of the 10-day Dhamma Discourse presentation).

### *Emotive feelings*

In the practice of Vipassana, Goenka of course differentiates between pleasant, unpleasant and neutral feelings as he guides the new students to continuously move up and down the body systematically 'part by part, piece by piece', not preferring one type of feeling over the other, observing whatever feelings are there. Thus he cautions against an unsystematic approach to the observation of bodily feelings whether they be pleasant, unpleasant or neutral. The following is a partial explanation of the process of observing the bodily feelings:

> Understand why you have to move [in order]: if you don't move, then when you feel a very strong intense sensation somewhere, your attention will go there. Suddenly something else will start somewhere else, and your attention will go there. You will be moving [unsystematically] from part to part (day four of the 10-day Dhamma Discourse presentation).

The experience of bodily feelings can be understood as the arising and cessation of dependent origination's contact-feeling process. Therefore, when Goenka instructs one to scan the body, he is guiding the individual to work on the gradual dissolving of what the Nikāyas term as *saṅkhāra*, the volitional forces and formations that both spark and manifest as emotion.[16]

The following sutta passage illuminates the practice of the observation of feelings:

> Whatever feeling he feels, whether pleasant, unpleasant or neutral, he abides contemplating impermanence in those feelings, contemplating fading away, contemplating cessation, contemplating relinquishment. Contemplating thus, he does not cling to anything in the world. When he does not cling . . . he attains Nibbāna
>
> (MN.1.251, translation adapted from Ñāṇamoli and Bodhi 1995)

For an individual trained in the mindful observation of bodily feelings, factors 5 through 9 of dependent origination predict that he or she would see or experience, whether in formal meditation or in daily routines, how the onset of a noticeably distinct feeling can spark the arising of a correlated and habitual conceptual-mapping as expressed in the Honeyball Sutta. Such a mapping primarily involves positive or negative conceptualizations about the object or incident. The individual would also tend to experience how this distinctive bodily feeling integrates

with the mapping thereby resulting in a conscious, mind–body emotional-conceptual event.

Goenka notes that the training passed through in his 10-day Vipassana meditation course enables one to experience the signature feelings and conceptual mappings of any distinctive emotion that arises in the body. In his example of depression the reader will see that this has some shared attributes with emotional intelligence:

> Say depression comes . . . [one then understands that] 'my mind is [conceptually] full of depression . . . and what sensation do I have now?' Any sensation that I have in my body at that time is related to that depression . . . and with the practice of Vipassana [which the person has learned in the 10-day course] . . . you [have] now experienced that every sensation that arises, arises to pass away . . . [so you observe the depression-related sensation] . . . it looses its strength . . . it passes away . . . you have not suppressed it . . . [it is in this way that] any kind of impurity, if you learn how to observe the sensation related to that, you will come out of it
>
> (S. N. Goenka 2000b)

In the utilization of Goenka's systematic part-by-part scanning of the bodily feelings, the procedure would go as follows: When noticing the arising of an emotion, through experiencing stronger than normal bodily feelings and noticing a negative change in the thoughts, the individual would commence scanning the body, mindfully and non-conceptually, and would then experience a reversal of the integration of the feelings with the thoughts. The arising of such an emotive feeling is considered as the arising of a *saṅkhāra*. As will be discussed later, it appears that the Nikāyas assert that when such a *saṅkhāra* arises, the 'history' of that category of *saṅkhāra* also arises on or is then accessible through the body.

## Eugene Gendlin and the epistemological function of bodily feelings

The philosopher-psychologist Eugene Gendlin created a philosophical system to explain the function and processes of affective bodily feelings in cognition. This system greatly influenced his evolution of the Focusing psychotherapeutic technique that in turn influenced the development of the school of Experiential Psychotherapy in Humanistic Psychology.[17]

First, Gendlin holds that the individual, through an omnipresent, 'unformed' pre-conceptual 'concrete feeling datum' (Gendlin 1962/1997: 14) at the felt bodily level, is experiencing life 'in the moment'; He terms this 'experiencing' (3). And when one turns one's attention towards this 'ever present feeling mass' (13), towards this 'global feel of your body' (12) he or she experiences

or feels the *meaning*, or 'accesses' at the bodily level, the essential attributes of what the 'moment' is pregnant with. This is because the turning of one's attention inward to attend to the feelings is an act of 'symbolizing' the meaning. Gendlin terms this the 'creation of meaning', or 'felt meaning', and asserts that it is from this creation of meaning rather than from intellectual conceptualizations, that any experience, any internal or external event or situation in daily life (14) draws its relevance, its 'meaning'. He emphatically sees the felt meaning as holding epistemological primacy over the conceptualizing mind in conveying the meaning or essence to the individual about his or her specific experiences. To quote, 'Meaning is formed in the interaction of experiencing and something that functions symbolically. Feeling without symbolization is blind; symbolization [read "intellectual conceptualizations"] without feeling is empty (5)'.

Thus the turning of one's awareness inward in reference to a specific felt bodily experience results in the process of demarcating a felt meaning off from the ever present feeling mass, that 'unformed stream of feeling' (3); this results in the creation of meaning, that relevancy which is the common denominator of any 'experienced' phenomena. The key operational aspect of this is the referring of one's awareness to a specific feeling and this is understood as a type of symbolization. Depending on whether the symbolization is verbal or not determines whether the felt meaning is explicit or inexplicit.

### *Direct reference*

Gendlin posits that there are seven very different ways in which felt meaning can interact with symbols (90). This section discusses one of these seven, 'direct reference'.[18]

First, Gendlin defines symbols as 'anything that performs the function of referring or specifying'. There are visual and kinaesthetic 'symbols' and in this sense action, objects, and situations can be 'symbols' (97). Accordingly, the act of turning one's attention inward, to determine how or what one feels, is a symbolization. Symbols are any phenomenon, including verbal, that cause one to refer to or to fix awareness on, or 'mark off' a feeling from the 'ever present feeling mass', thereby creating a felt meaning (96–97). So in the process of direct reference, the symbol directly refers to a specific felt meaning. However, unless and until a felt meaning is verbally symbolized, it remains inexplicit (Gendlin 1964: 9).

It is possible to illustrate the concept of 'direct reference' and thus explicit and inexplicit felt meaning, by examining the process of defining a word, for example, 'trustworthy'. It is held that in the process of defining the term, the individual, usually unconsciously, first directly refers to its felt meaning. For example, the term 'trustworthy' directly refers to a certain felt meaningfulness that effectively marks off or demarcates a felt meaning from the 'ever present feeling mass'. Thus the symbol 'trustworthy' gives direct reference to the felt meaning

and as such the felt meaning is the 'referent'. Moreover, this felt meaning is explicit as it is the referent of the verbal symbol, 'trustworthy'. Next, for many people, when considering the sentence 'the Swedish people are trustworthy', its felt meaning is explicit. On the other hand, the felt meaning of the symbol 'Swedish' will remain inexplicit within the framework of the sentence unless one then considers the specific meaning of 'Swedish': then its meaning will become explicated (Gendlin 1962/1997: 66).[19]

### *The psychotherapeutic use of direct reference to felt meaning*

Gendlin's philosophical articulation of the directly referred felt meaning reflects a particular functional relationship between symbols and felt meaning. This in fact is the operational aspect of his psychotherapeutic technique known as Focusing in which the direct referencing allows for the 'creation' of new, much more precise 'meanings' or understandings of emotionally charged events. The first operational factor in the 'creation of new meaning' is the turning of one's awareness away from the conceptual processing of the incident to its felt meaning: the second is verbally symbolizing it.

This direct, non-verbal referencing to the felt meaning has the effect of drawing the individual away from habitual, reactive conceptualizations that lock a person into an often erroneous cognitive paradigmatic assessment of the emotionally charged event. In this way, the creation of new meaning is initiated. Next, the felt meaning is verbally symbolized thereby bringing its meaning into the explicit thus expanding the creation of meaning. In this way someone who is ignored by several acquaintances as he or she approaches them may have strong thoughts of anger, or perhaps hate, arising. But when he or she turns awareness within to focus on the feelings associated with being ignored, he or she finds that they are not feelings of hate or anger, but rather of sadness or loneliness at being ignored. Thus these habitual thoughts are a result of an extrapolated reaction to feelings of loneliness/sadness and might be called 'old meaning' as this has often been the way in which the person has discursively reacted when ignored, having never been aware of the bodily feelings.

This direct referencing, which sparks the creation of new meaning, is the basis of positive personality change as understood in Experiential psychotherapy's Focusing technique (McGuire 1991: 233). In the discussion that follows, I will use Gendlin's philosophical articulations to give a more detailed outline of the Focusing technique, often using the terminologies from Gendlin (1962/1997).

### *Focusing*

The Focusing technique is taught in therapy by arousing in the client (if need be) a past emotionally charged event. First, the individual should locate the felt meaning of the event somewhere in the body, perhaps in the stomach, chest or throat

areas (Gendlin 1982: 44). As for the locating process, Weldwood (1980: 128) remarks that 'underneath a certain client's anger . . . is a wider sense of all that his anger means to him' and so that individual would turn his or her attention inward and locate that 'wider sense' thereby initiating the incipient, inexplicit stage of marking off a felt meaning.

Next, the individual focuses more narrowly on the felt meaning and intuitively chooses a word or a phrase to label it with (Gendlin 1982: 55). This is termed a 'handle', a verbal symbolization that attempts to adequately reflect the quality of the felt meaning, for example, 'sticky', 'heavy', or 'like in a box', or 'have to perform' (55), or perhaps 'jealous' (47–49); this begins the process of explicating the felt meaning as only a verbal symbolization can explicate an implicit felt meaning (Gendlin 1964: 9).

Once the individual settles on a handle, he or she checks back and forth between the handle, say 'jealous' and the felt meaning to ascertain the adequacy of the handle, that the handle grasps the essence of the felt meaning. It may be that this checking results in the refining of the handle, for example, to 'sort-of-jealous' as reported by Gendlin in a case study (46–50).

After this process of checking and refining, the therapeutic process is further widened by focusing on the felt meaning and asking it a full question such as, 'what is this "sort-of-jealous?" ' What is it about this whole problem that makes this 'sort-of-jealous?' (49); this in effect is widening the 'circumference' of the explicated felt meaning.

In the case study referred to by Gendlin, he reported that his client's husband returned home in the evening, announced that he had been given a promotion and soon thereafter accidentally broke a plate of expensive chinaware. The client reacted negatively, running to her room crying for the rest of the night. On later working through the focusing stages she experienced a bodily based conceptual insight that 'I am "sort-of-jealous" because my husband is advancing in his career and I am not. This because I can only take a part time job in order to take care of our child' (Gendlin 1982: 46–50).

The client was able to 'create new meaning' through, first, turning her awareness inwards and experiencing the feelings of the event, and then [next] putting them into words, that is, the handle and the questioning, thereby making the meaning much more fully explicit. This means that the wife was able to make a 'correct' sense out of her unexpected emotionally charged event and that this then had the effect of deconstructing the 'old meaning': that the event was due to her husband breaking the plate. Accordingly, all aspects of the direct referencing instigate healing and create new meaning, but it is the verbal symbolizations that bring the whole emotional event out from under a shroud of inexplicitness and allows for the overall resolution of it.

It is Gendlin's (1962/1997) philosophical system that gives the Focusing technique its form and its technical relevance. For this reason a review of the earlier stated Focusing stages *vis-à-vis* the philosophical system is now called

for. First, the initial turning of one's attention inwards, after an emotionally charged event, amounts to the incipient and inexplicit level of marking off the felt meaning. Along these lines then, this is also the incipient level of the creation of new meaning, the beginning of the healing process. Next, in giving it a 'handle', part of the felt meaning is made explicit and subsequently questioning the explicit aspects of the felt meaning further widens the explicitness (Gendlin 1964: 9).

What is happening is that the verbal symbolization, the handle, makes explicit part of what began as an incipient and inexplicit felt meaning; thus the verbalization causes some of that which is inexplicit to become explicit. This process is further drawn out through checking the adequacy of the handle, laying bare further inexplicated components of that which came into focus or became 'explicated', with the possible result of modifying the handle. Thus a wider and wider circumference encroaches upon the inexplicit fringe components, which are simultaneously being made explicit. This sequential widening of the marked off felt meaning by the investigative verbal symbolization advances up to the point that the handle is adequately symbolized; however, Gendlin holds that in *any* explicit felt meaning there are still foundational components of it that remain inexplicit (9–10).

Next, the felt meaning is focused on and formally questioned. This has the function of calling forth a major widening of the circumference of the explicit felt meaning from what, until now, had remained inexplicit. The 'creation of meaning' mechanism is a process of first locating and then making explicit a large circumference of the felt meaning that is involved in the emotionally charged event but was still implicit, still not fully brought into awareness (Gendlin 1962/1997: 65–67).

### *Reflection on points of convergence*

Goenka, in keeping with the Nikāyan view, teaches the systematic scanning of the feelings on the body. Gendlin on the other hand, based on his philosophical system and psychological training, aims at the creation of a 'new narrative' distinct from the original discursive conceptualizations through the verbal 're' symbolization of the felt meaning. This is the critical difference between the two therapeutic stances. But yet they share a common ground, the observation of affective bodily feelings.

In drawing out this last point, Goenka sees pleasant and unpleasant feelings as being the manifestation of *saṅkhāras* or volitional forces (Goenka 2000a: day eight of the 10-day Dhamma Discourse presentation). It has been my experience in practicing this meditation technique that when I am confronted by a significant emotive sense object, especially where anger, depression or strong craving is concerned, I immediately experience distinctive feelings in my throat and chest area. Of course the corresponding negative thoughts also tell me that I have entered into an emotional event. Next when I turn my attention from my throat and chest

area and commence the scanning of my whole body, I experience the negative feelings in this area melting away. This is equally the case if I intentionally scan all parts of my body except the throat and chest area. The same is true of the negative thought patterns, which also melt away.

Following this line of reasoning, when I have experienced such a distinctive feeling and turn my attention to it, I have, as per Gendlin's definition, marked it off at the inexplicated level of felt meaning. In using sutta parlance, the felt meaning appears to be a manifestation of volitional forces and formations (*saṅkhāra*). As for the conceptual mapping that arises conditional to this distinctive feeling, it would up to this point be, according to Gendlin, a conceptualization which is not able to directly refer as a symbol to a felt meaning (Gendlin 1962/1997: 95); it is a habitual thought pattern that is rash and reactive leading to insensitivity of bodily feelings.

As reflected in the Honeyball Sutta, the discursive mapping is full of desire or aversion both being based on ignorance and these three *saṅkhāras*, as habitual tendencies, condition the discursivity in a significant way at the dependent origination factor of craving. In both systems once the individual turns his or her attention to the distinct, affective feeling or the felt meaning, the conceptualizations begin to loose their authority. It is at this point that the Vipassana and Focusing techniques go down what appear to be different paths. The practitioner of the Vipassana technique would at least be aware of both the distinctive feeling and the thought pattern(s). He or she would experience that both were correlated, mindfully observe this distinctive feeling for some time and then return to the systematic scanning of the body, 'dissolving' the bodily feelings throughout the body. The Focusing practitioner would, on the other hand, then give a handle to the felt meaning in order to make the quality of the feeling explicit. Then by checking the handle and then asking questions of the felt meaning, the circumference of the felt meaning grows as the implicit bodily feelings surrounding the area of the explicated felt meaning become explicit through this process of naming and questioning.

Goenka sees that the return to the systematic scanning of the feelings returns the individual to the deconstruction of the afflictive volitional forces (*saṅkhāra*) and latent afflictive emotional tendencies (*anusaya kilesa* cf.: n 16), what I have referred to earlier as the 'history' of that category of *saṅkhāra*, that category of whatever distinctive emotive feeling that had just manifested. He holds that as one observes the feelings without reacting to them the process of creating new *saṅkhāras* is interdicted while the repository of 'historically' similar formations arise to the surface creating a feeling as they do and then, if there is no reaction to the feeling, they also pass away (Goenka 2000a: day six of the 10-day Dhamma Discourse presentation). This also seems to be what is happening when the Focusing practitioner begins widening the circumference of the felt meaning by checking the handle back and forth and then asking questions of the quality of the wider felt meaning. It appears that the inexplicit areas of the body surrounding the explicated felt meaning also are a repository

of the 'history' of this particular category of emotive feeling. Thus it could be argued that this widening of the circumference could, if taken to its limits, encompass the whole body.

The following sutta passage would seem to apply to both systems: 'He dwells contemplating impermanence in contact and in pleasant and unpleasant sensations…and [therefore] the underlying tendency (*anusaya*) to desire and aversion is abandoned [or deconstructed] in him' (SN.4.214, translation by Bodhi 2000).

Here, I have roughly equated Gendlin's 'felt meaning' with the Nikāyan concept of the *saṅkhāra*, and his 'inexplicit felt meaning' with the concept of the *anusaya kilesa* (latent afflictive emotional tendencies). In view of this, the structure of the felt meaning, from the first turning of the attention inwards to the felt shift, now needs drawing out. From a Nikāyan point of view, the arising of the original emotionally charged event such as the wife who ran to her room crying when her husband broke a plate, is intricately connected to volitional forces/formations. But as seen in the aforementioned sutta quote, currently arising pleasant or unpleasant feelings are attached or interwoven with the underlying 'historical' formations of latent afflictive emotional tendencies (*anusaya kilesa*) towards desire or aversion.

This can be better understood by examining the case of the wife who had unresolved career issues. In a Nikāyan analysis of her emotional event, we can begin to outline the following sequence and conditions:

1 The husband talks about his promotion.
2 *Saṅkhāra*-based unpleasant feelings, tinged with self-interest, arise in his wife unattended to.
3 A conceptualization arises which does not adequately reflect the nature of the unpleasant feeling.
4 The plate breaks.
5 New *saṅkhāra*-based unpleasant feelings arise unattended, conditioned by the breaking of the plate.
6 This second set of feelings arises masking the first.
7 A conceptualization arises which does not adequately reflect the nature of the unpleasant feeling.
8 She breaks down and goes into her room upset for the rest of the night.

### *Analysis*

In point 2, unpleasant feelings arise unattended in the wife. If she had immediately began to focus, she would have found a strong feeling in the throat and chest area. However, these feelings arose unattended to. The inexplicated areas of her body surrounding what would be the felt meaning in the focusing process, are the

repository of the 'history' of her habitual self-interest. At the level of felt meaning these feelings would be connected to the unresolved issues related to her role of a caregiver mother as opposed to fully pursuing a full time career. In point 3, it is hypothesized that the conceptualizations, in as much as they do not adequately reflect the nature of the unpleasant feeling, are giving some aspect of a positive commentary on her husband's news. Therefore, these unpleasant feelings are unconsciously suppressed and at least at the cognitive level, the wife constructs a 'positive' commentary not reflective of what has become a complex mixture of feelings.

In points 4–8 the husband breaks the chinaware plate and conditions a new set of unpleasant feelings to arise unattended. To this we can hypothesize that this time instead of suppressing the feelings and constructing a 'positive' conceptual commentary, such as 'Oh don't worry, it is only a plate', the wife's unpleasant feelings condition a negative conceptual commentary such as 'you broke my heirloom china!' This is due to the feelings emanating from the repository of the 'historical' formations begin to freely flow thereby drowning out her efforts to suppress. Hence the intensity of the emotional reaction did not accord with the accidental nature of the breakage of the plate.

From the Nikāyan perspective, it can be assumed that a body-wide reaction took place wherein the stock of latent formations of afflictive emotions (*anusaya kilesa*) came into play. Therefore at least from the breaking of the plate forward, what can be seen is that as the event unfolded as an *inverse* application of the earlier quoted sutta of SN.4.214. This means that the manifested and unattended bodily feelings opened the channel to their corresponding repository of 'historical' habits (volitional formations of afflictive emotion). As they then were able to flow freely, the client was blinded by a tapestry of unpleasant feelings, old stocks of feeling-based aversion grounded in self-interest, and delusive conceptual mappings all of which were feeding on each other. This is directly reflected in the sutta passage that states:

> When one is touched by a pleasant feeling, if one delights in it . . . and remains holding to it, then the underlying tendency to lust lies within one. When one is touched by an unpleasant feeling, if one sorrows, grieves and laments . . . then the underlying tendency to aversion lies within on
>
> (MN.3.285, translation adapted from Ñāṇamoli and Bodhi 1995)

In staying with the Nikāyan analysis and looking at how the wife later reviewed the incident in her Focusing session, it can be stressed that the Focusing technique aroused and laid bare a primary set of volitional forces and formations which offered a much more accurate bodily mapping of the incident. This resulted in the creation of new meaning in that she came to understand that the 'real' base of her

anger–jealousy was not breaking the plate, but rather not being able to pursue her career while watching her husband succeed in his career.

In sumation, the Vipassana technique of scanning the body and the Focusing technique of making explicit the inexplicit are using bodily feelings in an importantly similar way, so much that they appear to be of related categories.

## Conclusion: fixing the ego or transcending it?

This interdisciplinary study briefly examined the work of S. N. Goenka and E. T. Gendlin for the purposes of gaining a perspective of how Nikāyan Buddhism's practice of the mindful observation of feelings can be therapeutically efficacious. It has also shown that these two historically important techniques, Goenka's body scanning technique and Gendlins's Focusing technique, may be working at a level more closely related then would normally have been expected.

As for modern psychology, psychotherapy is often considered as an endeavor to help the client to realize a therapeutically well-founded functioning ego; this being the healing of the divisions within the ego. On the other hand Nikāyan Buddhism, through its meditation practices, is often thought of as a system to transcend the ego. However, a case could be made that the sutta-based Vipassana practice also results in the healing of the divisions within the ego as the suttas see craving itself as dividing it into the extremes of indulging in sensual pleasures or conversely, indulging in behavior based on aversion (MN.1.16). So Focusing's widening of the explicated felt meaning to include the inexplicated feelings and Vipassana's systematic scanning of bodily feelings seem to have the same operational dynamics, that of bringing latent emotive feelings to the surface. If this is correct, then the similarities of what is at work when one looks at one's bodily feelings, whether in Focusing or in Vipassana, begs for a reconsideration of the semantic character of how to therapeutically understand the ego. Therefore the stereotyped dictums of an integrated ego (psychotherapy) and a transcended ego (Buddhism), in the case of Focusing and Vipassana, have within them the inverted and unintentional functions of, respectively, transcendence and integration. In this way important elements of these two techniques come full circle and partake of each other's *raison d'etre*.

## Abbreviations

All Pāli references are to discourses in the Pāli Tipiñaka.

MN Majjhima Nikāya
SN Saṃyutta Nikāya

## Notes

1 The Saṃyutta Nikāya is the third collection of Pāli Buddhist suttas. (This translation of SN.2.64–65 was adapted from Bodhi 2000.)

2 Adapted from Ñāṇamoli and Bodhi 1995, MN.1.59.

3 The term 'Nikāyan' refers to the understanding of the Buddha's teachings in the five collections Nikāyas without reference to the later Abhidhamma or Commentarial traditions.

4 The Mahasatipaṭṭhāna Sutta says that *satipaṭṭhāna* practice is the *ekāyana* or primary path, for the purification of the mind. Gethin (2001: 59) noted this '*ekāyana* formula' is the only teaching in the suttas in which the Buddha ascribes the adjective of 'the primary way'.

5 Dependent Origination's 12 factors are as follows, (1) Ignorance (*avijjā*), (2) Volitional Formations (*saṅkhāra*), (3) Consciousness (*viññāṇa*), (4) Mind–Body (*nāma–rūpa*), (5) The six sense bases (*saḷāyatana*), (6) Contact (*phassa*), (7) Feeling (*vedanā*), (8) Craving (*taṇhā*), (9) Grasping, Clinging (*upādāna*), (10) Becoming, Existence (*bhava*), (11) Birth (*jāti*), (12) Old age and death (*jaramaraṇa*).

6 This term *'vitakketi,'* can also be rendered in English as 'reasons about' (Ñāṇananda 1986: 3). Ñāṇananda also holds that the term *vitakketi* 'presupposes language' p. 4.

7 The fact is that both *'vedeti'* and *'sañjānāti'* are the verb forms of the nouns, feeling (*vedanā*) and perception (*saňña*). In general, the suttas see the verb and noun usages as synonymous (cf. MN.1.293). Thus they reflect that Pāli Buddhist psychology is process-oriented rather than segment-oriented, that its key elements could not actually be separated: 'Feeling, perception and consciousness, these states are conjoined, not disjoined, and it is impossible to separate each of these states from the others in order to describe the difference between them' (Ibid.: translation adapted from Ñāṇamoli and Bodhi 1995).

8 Of course *saññā* is the third aggregate and as such this passage reflects that in certain ways, the Nikāyan models of the five aggregates and dependent origination can be interconnected.

9 The term *taṇhā* has an etymology that implies 'thirst', while the term *upādāna* has an etymology that indicates the energy one uses to mentally grasp onto something.

10 The term *dukkha* is perhaps, along with 'the ending of *dukkha*', the major theme of the Buddha's teaching (MN.1.140). It has polyvalent meaning, all of which are negative. A close reading of the Nikāyas strongly indicate that most *dukkha* is experienced and builds up at the unconscious level. Historically it has been translated into English as 'suffering' or 'unsatisfactoriness' neither of which capture this unconscious build up.

11 I assert this because feeling and craving, are both emotional phenomenon and most likely the boundary between them as seen in the 'factors' of the model of dependent origination, should only be academic. In view of this, discursive conceptualizations are, in general, a different category of phenomena than emotional processes and as such should arise after the craving process has ensued.

12 AN.5.107: *Vedanā samosaraṇā sabbe dhammā*.

13 This also has its correlation in the Nikāyan model of the five aggregates (*pañc upādānakkhandhā*) of attachment. In addition, in some sense it can be said that all five converge on the second aggregate of feeling as all mental phenomenon are seen as arising with a feeling. This can be seen in statements such as 'all mental phenomena arise with a feeling' (*Vedanā samosaraṇā sabbe dhammā*), at AN.5.107.

14 The function of the *saṅkhāras* is intricately connected with the feeling-*taṇhā* process (Harvey 1995: 72–73) and as such, an individual's volitional forces, either currently arising or as dormant latent tendencies are tied up with the past experience of bodily feelings and one's reactions to those feelings.

15 Goenka teaches the observation of bodily feelings in 10, 20, 30, 45 and 60-day residential courses. My discussion herein will be in reference to his 10-day course and its evening 'dhamma discourses' as the presentation in the 10-day residential programme is inclusive of all of the basic instructions and explanations of how and why to observe bodily feelings. I will also make reference to certain public talks given by Goenka as concerns the 10-day programme. Over 1,000,000 people have now participated in his ongoing 10-day courses in over 80 Vipassana meditation centers worldwide.

Although Goenka holds a historical importance in the internationalization of Buddhist meditation, his views as per Pāli Buddhist mindfulness principles and practices have been largely ignored by specialists in Pāli Buddhist studies.

16 The multidimensionality of the system can be ascertained by examining the term '*saṅkhāra*'. It can indicate both 'volitional forces' and 'volitional formations'. *Saṅkhāra* as a volitional force is emotionally based and arises with and conditions any given contact-feeling process (as well as conditioning perception (*saññā*)) (cf. SN.3.86–87), while *saṅkhāra* as a volitional formation, also emotionally based is seen as conditioned by attachment to the seventh factor of dependent origination, feeling, and intertwined with the eighth and ninth factors of dependent origination as desire-based latent afflictive emotional tendencies (*anusaya kilesa*) (cf. MN.3.285) *anusaya kilesa* is considered as a *saṅkhāra*. Volitional formations are understood as a 'residue' of past volitional forces which form a latent or dormant unconscious substratum (*upadhi*) of *anusaya kilesa*.

17 Cain and Seeman (2002: 39), noted that 'Eugene Gendlin made a major contribution to humanistic therapies by developing the process of experiential focusing'. I would like to go one step further and assert that he is in fact one of the most important philosophers of the twentieth century. Nevertheless, it seems that neither Gendlin nor his philosophical system articulated in Gendlin (1962/1997) is well known or understood outside of Humanistic psychology.

18 This is because, of the seven, it is direct reference that plays the key role in Gendlin's psychotherapeutic technique.

19 In using the terms 'explicated' and 'inexplicated' I am keeping within Gendlin's technical use of the same terms.

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# 15

# ZEN KOAN AND MENTAL HEALTH

## The art of not deceiving yourself

*Mu Soeng*

> Ruiyan [a monk in medieval China] used to sit in the public courtyard of his temple whenever he was not working in the fields. He would carry on an audible conversation with himself and call out to himself,
> "Master."
> And answer himself, "Yes, sir."
> He would then say, "Always be careful," and answer himself, "Yes, sir."
> He would then continue, "Do not be deceived by anything," and answer, "Yes, sir."
>
> Case #12 *Wu-men-guan* (Jap: *Mumonkan*; the Gateless Gate)
> (Yamada 1979)

There is a general consensus among scholars and Buddhist teachers that the Buddha's intention in "returning to the world," after his awakening experience, was not to offer an ontology, a metaphysics, or a cosmology to his listeners. Rather, his concern seems to have been with our misunderstanding of the existential reality. As mentioned repeatedly in various *suttas* (discourses) of the Pāli Canon, this concern is expressed as the problem of *dukkha* – how it originates and how it is brought to cessation. The Pāli term *dukkha* is a multivalent term whose nuanced understanding might help us discover how the issues of mental health and therapy are embedded in the basic intention of the Buddha.

Far too often, *dukkha* has been over-simplistically translated as "suffering." A more careful investigation of the word, however, gives us translations such as stress, unsatisfactoriness, pain, a sense of incompleteness, anguish, and so on. While the Buddha spoke often of the *dukkha* of the body such as aging, sickness, and death, his second noble truth of dependent-arising (Pāli: *paṭicca-samuppāda*; Sanskrit: *pratītya-samyutpāda*) places an understanding of *dukkha* very much in the domain of mind and its working. In the conventional presentation of the second noble truth as a twelve-link dependent-arising and working of the

human condition, of saṃsāra, links 8–10 (*taṇhā*/longing; *upādāna*/clinging or grasping; *bhava*/being–becoming) offer themselves as a crucial subset in the origination of *dukkha*. Modern psychotherapy may see the etiology of this model as paralleling the assumptions of their own model. I have explored the dynamic of this subset at some length in my book, *Trust in Mind*, which is a commentary on the famous Zen poem *Xinxinming* (*Hsin Shin Ming*), and the reader may refer to it for a broader discussion (Mu Soeng 2004: 29–31).

This chapter seeks to explore the issue of mental health through the koan methodology of Zen Buddhism. It seems important to state at the outset that while there will be inevitable references to contemporary psychotherapy, the aim of this chapter is to provide a context for Zen perspectives on mental health. This chaptper, therefore, works within an awareness that there may indeed be stubborn anomalies in both Zen Buddhism and psychotherapy that do not easily lend themselves to a concordance of motives and intentions. Not the least of these is the fact that the two traditions may have very different models of mental health. It should also be noted that in recent years a number of volumes have appeared in the West on the interface of Zen Buddhism and psychotherapy, both from clinical and psychological perspectives, and there is not much I can add to that expertise. The focus of this chapter is, instead, on personal practice and worldview of Zen and its relevance to the issue of mental health. Such a focus on worldview necessarily highlights the divergence between koan practice and psychotherapy after an initial and amiable convergence of tracks. Most of the assumptions behind any model of mental health may yet turn out to be cultural rather than purely clinical. Buddhist assumptions are necessarily different from those of a contemporary clinician working with medical and pharmacological models. At the same time, Dr John Suler, a contemporary American psychotherapist, has done one of the most effective explorations of parallel breakthroughs that take place in koan practice and psychotherapy (Suler 1993: 79–99). His models and language go a long way in bringing the two approaches much closer, and I am happy to acknowledge my debt to his articulations.

In exploring the world view and personal practice of Zen koan, it is also inevitable that this chapter's focus should nestle itself within the broader framework of the basic teachings of the Buddha in order to contextualize the equally broad issue of "awakening" being synonymous with mental health. The specific historical background of the Zen koan consciously places itself within the doctrinal spaces of Indian and Chinese Buddhism, most notably the aspiration to Buddhahood. The matter of not deceiving yourself, the title of this chapter, may work out in psychotherapy with the deceptions generated by the neurotic symptomatology (of the self). The concerns in Buddhist practice, in general, and koan methodology, in particular, have to do with the deceptions generated by the ontology of the self. This epistemic commitment or "spirituality" of Buddhism is being seen increasingly not only as an important focus of psychological theory and research but an essential foundation of psychological health and healing by those psychotherapists who have been influenced by Buddhist theory and practice (Magid, Rosenbaum, Rubin, Safran, Suler, Young-Eisendrath, among others).

This distinction between the neurotic self (or neurotic symptomatology of the self) and the ontological self (or the construction of the ontology of self) allows us to state that for Zen Buddhism (as for Buddhism in general) mental health means freedom from the delusion of an autonomous, self-validating self. This definition of mental health lends itself easily to Zen Buddhist understanding of enlightenment or the awakening experience. It is also noteworthy that this model of mental health does not seem overly concerned with the working of the neurotic self, that is, it may allow for some neurotic quirks to continue as part of the social personality so long as the ontology of the self has been completely deconstructed.

This understanding of mental health may be at odds with models of mental health in Western psychotherapy. Part of the difference may be that in traditional Zen and Buddhist models, mental health is firmly embedded in a "spiritual" framework. Again, as we know from contemporary discourses, "spiritual" or "spirituality" is notoriously difficult to define. Nonetheless, it is interesting to see how Asian psychotherapists may weave their understanding of spirituality in their psychotherapy practice. At a recent conference in Boston on Buddhism and Psychotherapy, Dr Yasunobu Okada, a Japanese psychotherapist, said that he defines spirituality as "what people need to face death." He said that in traditional Japanese Buddhism, there has been a culturally built-in preparation for death, but

> we moderns seem to be far away from an intimate awareness of death . . . [Today] we seem to be seeking some peak spiritual experience that will inspire us. They often turn to psychotherapy or new age religion for such an experience. They do this, it seems, because they need something with which to face death.[1]

What's relevant for the purposes of this chapter is that within the dynamic of longing–clinging–becoming, the imbalance of mental health is moving along a spectrum from the neurotic self (named and unnamed longings) to an ontology of the self (being–becoming), with clinging playing the role of the glue that binds the two ends with which the neurotic self identifies and reifies. In classical Buddhist training, it's not for nothing that clinging or grasping is described as the dynamic that needs to be addressed much more deeply than the longing itself. Longing is an expression of our humanity; grasping is the function of neurosis.

In the famous first line of the Zen poem *Xinxinming* "The Great Way is not difficult for those who have no [addiction to] preferences," I have added the qualifying condition of "addiction" to tease out the deeper meaning of the line. It is human to have preferences. One person likes her coffee black; the other person likes it with milk and sugar. These are harmless, eccentric preferences that find easy nests in our psychic lives. But when a preference for one kind of coffee becomes so dominant that it distorts the entire system of emotional responses, it moves the person into the realm of neurotic afflictions and anguish.

In the "reverse turning of dependent origination" (as the third noble truth of the Buddha is sometimes called), the cessation of *dukkha* begins to take place when

a space is created in the psychic life to explore the dynamics of longing and becoming in a stable environment. This is very much an etiological model and a response to the problem. The fourth noble truth outlining the Noble Eightfold Path (*ariya aṭṭhaṅgika magga*) is the doctor's prescription that will actually cast away the disease from the system.

The cessation (*nirodha*) of longing–clinging–becoming is the causal condition for nibbana/nirvana in the Buddha's terminology. When nirvana is translated as "transcendence" (as it usually is by many in the West) an unfortunate proclivity is to portray it as a metaphysical or ontological condition which violates every level of understanding in the Buddhist philosophical tradition. *Nibbāna*/nirvāṇa is an *experience*, in time and space, of freedom from mental afflictions, and *nirodha* is the methodology that makes the freedom possible. It seems to me that both *nibbāna* and *nirodha* are conflated in the colloquial term "letting go" but in a deeper meditative investigation of "letting go," *nirodha* may be considered a letting go of the imperatives of the neurotic self, and *nibbāna* as a letting go of the ontology of the self. Taken by itself, letting go of longing and clinging may be a model of mental health for the psychotherapist; combined with letting go of "becoming" or the ontology of the self, it becomes a model of mental health for the Buddhist practitioner.

The imperatives of longing constantly force us to dwell in the past or in the future. We go into the past to rearrange its narrative in self-justifying ways, and we go into the future seeking to impose a parallel self-justifying narrative on the likely turn of events. Both narratives employ the strategies of anxiety and fear to keep the neurotic self in business. Cessation of fear and anxiety is the cessation of *dukkha* in the psychic life and a restoration of mental health. The koan practice in Zen Buddhism seeks the cessation of anxiety and fear but also a lot more. Its goal, as mentioned earlier, is nothing less than a deconstruction of the ontology of the self to move the healing paradigm into the existential human condition. It is, however, important to keep in mind that traditional Zen literature does not use the psychological or philosophical language being used here. But it's not unreasonable to expect that in our own time and place a careful use of this language may enable us to access the deeper meaning of Zen practice and its inspiration.

Erich Fromm, following D. T. Suzuki, argues that mental health in Zen Buddhism offers the following conditions of being:

1) Zen is the art of seeing into the nature of one's being;
2) It is a way from bondage to freedom;
3) It liberates our natural energies;
4) It prevents us from going crazy or being crippled;
5) It impels us to express our faculty for happiness and love;
6) The final aim of Zen is the experience of enlightenment, or *satori*.

(Fromm *et al.* 1960)

Fromm goes on to say that "*Satori* is not an abnormal state of mind; it is not a trance in which reality disappears. It is not a narcissistic state of mind, as it can

be seen in some religious manifestations" (115). He quotes Suzuki as saying,

> [in *satori*] all your mental activities will now be working in a different key, which will be more satisfying, more peaceful, more full of joy than anything you ever experienced before. The tone of life will be altered. There is something rejuvenating in the possession of Zen. The spring flower will look prettier, and the mountain stream runs cooler and more transparent.
>
> (115)

D. T. Suzuki, it should be noted, was affiliated with the Rinzai Zen of Japan where koan practice is traditionally emphasized. The use of koan methodology is not unknown in Soto Zen but it is not the central practice there as it is in Rinzai Zen. Suzuki's various articles on the koan method, written over a span of half a century before his death in 1966, have also been collected in a single volume "The Zen Koan as a Means of Attaining Enlightenment."

In Suzuki's writings, *satori* or awakening experience is synonymous with perfect mental health. While koan practice is not the only technique for generating *satori* experience in Zen Buddhism, it certainly is one of the most intriguing artifacts of Eastern spirituality to come to the West. In its original form, the term koan (Chinese: *kung-an*, literally "public document") refers to dialogical encounters between masters and disciples in medieval China out of which came an enigmatic or paradoxical riddle that defies logic and conventional use of language. The colloquial use of the term in China refers to a decree issued by the emperor of which a copy was made for archival and verification purposes. The original and the copy were put together and a seal was embossed on the two documents in such a way that each document had half of the seal on it. The authenticity of the copy could easily be verified when its half of the seal was matched with the other half on the original document. When this "matching halves" modality worked its way into the dialogical encounters of Ch'an teachers and disciples, it was implied that when the student came to realize what the teacher was trying to transmit through a nonsensical use of language, the "mind-seal" was affirmed. This "mind-seal" was a "mind to mind transmission" that authenticated the student's realization/awakening, and also became a catalyst for lineage transmission. We can infer some faint echoes of this dynamic in a therapist–client relationship wherein the therapist is trying to create a "space" in which the patient can see for herself or himself the ways in which he or she is stuck in a particular situation.

The Zen dialogical encounters originated as a distinct form of working with and through what was seen essentially as a "spiritual malaise" of human condition. This approach stands in contrast to the conventional form of sermon by a Buddhist teacher. In its original form, the spontaneous one-on-one encounter became the core organizing principle of spiritual practice rather than the one-to-many dissemination of wisdom in the sermon form. Even when Zen practice became more formalized in medieval Japan and sermons became *de rigueur*, the personal

"interview" with the teacher still remained both as an artifact and a living legacy of the earliest form of Ch'an. The spontaneous encounters of koan methodology, as they were recorded in its earliest history in medieval China, made a distinction between "informal practice" and "formal training." The latter was undertaken as part of a group discipline following prescribed protocols, such as sitting in meditation hall in a certain posture for a certain period of time. The informal practice was considered life itself where the most mundane events of daily life presented themselves as opportunities for breaking free of the delusion that saw the self as separate from everything around it. If one was not separate from things around it, one *was* all the things around oneself and therefore free of a dualistic relationship from those things. This freedom or awakening, and its consequent model of mental health, meant the ability to move with and through all the things around oneself without hesitation or paralysis.

One of the key reference points in the history of Zen Buddhism is the encounter between Bodhidharma, its legendary founder, and Chinese emperor Wu Liang, at whose court the Indian monk is said to have arrived in 520 CE. The legend of this encounter tells us that the emperor, who was a devout Buddhist, enumerated to Bodhidharma all the temples he had arranged to be built, how many monks and nuns he had supported, and how many sutras he had copied with his own hands. "What," he then asked the bearded monk, "is the merit of all this great work?" "None whatsoever, your majesty," replied Bodhidharma, without missing a beat.

This is perhaps the only account in Chinese Buddhism of an emperor-patron receiving such an uncompromising reply from a Buddhist monk to his supposedly holy works. The puzzled emperor then asked the monk, "What is the central teaching of Buddhism?" to which Bodhidharma is said to have replied, "Vast emptiness, nothing holy."

This reply again seemed to be something outside the emperor's frame of reference. In exasperation, he asked the monk, "Who are you?" meaning presumably, "what are your qualifications to give me these crazy answers?" to which Bodhidharma is said to have nonchalantly replied, "I have no idea."

The literal translation of Bodhidharma's response is, "This is not knowing" but its deeper meaning gains currency, and a certain panache, in the more vernacular phrasing of "I have no idea" or "Don't know." This "Don't Know" or "Not-Knowing" has since become an essential ingredient in formal Zen training, and invites a deeper consideration of mental health. The Not-Knowing of Zen is a different kind of knowing, at odds with information-processing and even what we conventionally call "knowledge." The best we can say about not-knowing, within the limited scope of this chapter, is that it is the boundless open space of the deconstructed ontological self where words and thoughts do not have a privileged position. This is illustrated in the following verse attributed to Bodhidharma that has since become his legacy to later generations:

> A special transmission outside the sutras;
> Without depending on words and letters;

> Pointing directly to one's own mind;
> Seeing into one's true nature and realizing Buddhahood.
> (Dumoulin 1988)

Historians and practitioners have been parsing various elements of Bodhidharma's encounter over centuries but what's particularly interesting for us is the self-conscious claim of the Zen tradition that his admonition of "pointing directly to one's own mind" is a paralleling of the *intention* with which Shakyamuni Buddha sat down under the Bodhi tree during his awakening experience. The legitimacy claimed by the Zen tradition is that it is merely retrieving from among many diversions of Buddhist tradition the central fact emphasized by the Buddha, namely, that spiritual practice entails one thing and one thing only: understanding your own mind, that is, how *dukkha* originates in your our mind and how it proliferates.

This enterprise of self-understanding is not merely of academic interest but a deep exploration of how the causal factors of longing–clinging–becoming operate in our own lives, and how to become liberated from the bondage of those factors. Liberation from the clutches of these causal factors is the footprint of awakening advocated by Zen Buddhism as well as all other meditative traditions in Buddhism.

How does koan practice help in the process of self-understanding/liberation? And what might be its connection with the model of mental health in psychotherapy? Here Dr Suler's insights are quite helpful.

> Such a focus [on the application of the koan and the underlying Zen psychology of paradox as a model for understanding psychotherapy] can reveal the various elements of paradoxical self-contradictions that underlie psychological transformations – including the shift in one's perspective of reality, the conflict of internal representations and levels of self, the interweaving of self-affirmation and negation, and the puzzling dynamics of the self that turns back to capture, understand, or reflect on itself.
> (Suler 1993: 80–81)

For Suler the paradoxes of koan and psychotherapy practices allow the observing self to have a tantalizing glimpse into how various layers of selfhood within dispute each other to no end. The initial and natural response is to work it all out intellectually but that in turn produces a crisis of thinking that lasts as long as the patient/practitioner is trying to cogitate a linguistic, intellectual answer. Bodhidharma's dictum of pointing directly to mind without words or letters becomes a poignant struggle that ends only when the addiction to linguistic frameworks is abandoned. The paradox of the internal disputes of selfhood becomes

> digging, churning tool that penetrates directly into the roots of who we are. Multiple components of one's self-structure are jostled, loosened, forced to the surface . . . The problems of one's life are uncovered and

> questioned. The koan is a struggle for one's very existence. One becomes the self in contradiction with itself.
>
> (81–82)

Zen tradition uses the term "mind-sickness" to point to the role of internal chatter each person carries on with himself or herself at all times. Most people are not even aware that this internal chatter is going on. A careful investigation reveals we claim ownership of the *contents* of this internal chatter as "this is mine" or "this is me." Through ownership of something that's going on exclusively inside our heads, we are constantly and unconsciously defining ourselves, and creating self-serving feedback loops of immense complexity. We create layers of selfhood that become their own trap. In all these feedback loops the contents of the internal chatter present themselves as enticingly real and valid. Rarely do we realize that they are nothing more than mere views and opinions, created by specific circumstances and conditioning. Such is our investment in our views that we are always willing to defend them over the views of others, implicitly believing that our views are real while others' views are mere opinions. The margin of error between the internal chatter of the so-called average person and the one admitted to a mental hospital is quite thin indeed. Although the language of "emotional energy" is not explicitly available in Zen texts, it seems to me that in their own way all Zen teachers are talking about the emotional energy behind passions or cravings and clinging to that energy. It is the working of this energy that separates ordinary deluded people from those who need to be committed to a mental hospital. Of course, today we know a lot more about brain chemicals and disorder caused by them under certain conditions but it would seem that the disorder may be triggered by a certain intensity of emotional or thinking energy. A fuller discussion of this issue is, however, beyond the scope of this chapter.

The efficacy of koan practice and psychotherapy produces

> a sudden insight that expands one's perspective of reality. The old assumptions and perceptions of oneself and the world – one's "old hometown" – are realized as illusions and are discarded. For the Zen student, it is a clearer, broader view of the ontology of self and other. So, too, it is for the psychotherapy patient, although the insight specifically reveals the unconscious transferential and parataxic distortions that warp one's day-to-day perceptions of self and other.
>
> (83)

The Buddha started his exposition of the twelve links of dependent-arising (the second noble truth) with *avijjā* (delusion or ignorance). It is through delusion or distorted perception that we project a permanent and substantialized self in a separated and autonomous relationship with the world. The task of both Buddhist practice and psychotherapy is to see that, "The self is a complex, changing constellation of forces, properties, and relationships. Paradoxes within it abound" (86).

In other words, "self" is a process, not an entity. This (mis)cognitive framework was the central concern of the Buddha. We remain deluded or ignorant so long as we are in the grip of our internal chatter that's constantly forcing us to adopt misplaced views, in ignorance of the essential nature of phenomena.

In the discourses of the Pāli Canon, the Buddha laid inordinate emphasis on the purification of views (*diṭṭhi*). In our transit through the phenomenon we call life, we get into trouble because misperception leads to a distorted cognition and an unsustainable view about things; hence, mental afflictions and aṅguish. Buddhist tradition uses the word *kilesa* to speak of defilements or blind passions that rule our lives. So long as we are driven by these blind passions our basic intention about being in the world is malformed, leading to equally distorted perception and cognition. A correction in perception leads to a more balanced cognition which in turn allows us to live in the world with a sense of ease. The most balanced corrective, in the Buddha's teachings, is not only the wisdom that we cannot hold on to things but also the deeper wisdom that there is nothing to grasp on to in the internal and external phenomena. In both koan practice and psychotherapy,

> the final trigger for an experiential breakthrough is an unselfconscious surrender, a relinquishing of control to the unconscious, to something beyond the conscious self. The tendency to cling to one's illusions and symptoms because they are familiar, out of a fear of the unknown, must be bypassed. Desperately hanging on the edge of the precipice, one must simply let go. Paradoxically, losing oneself is finding oneself.
>
> (84)

The ultimate problem, then, is an unrelenting grasping or ownership of views, and the distortion that happens in perception and cognition as a result of that grasping. This is the problem of self-deception. The ultimate act of psychological transformation is the surrender or letting go of the ownership of all views, ideas, and identities. One must relearn to live the self as paradox in which contradictions abound and everything is in flux. This in turn is the model of mental health in which as one strips away each psychological and ontological layer of selfhood, one is driven deeper into the source of the self. One must live through the insight that it is futile to actively search for the source of the self, and the only healing avenue available is to let the source of the self be revealed through the working of the paradox. In working with the paradox,

> one comes to recognize that all the features of the object self – including self and object representations, thoughts, attention, memory – are not the core self. Transcending these features of the self-as-structure is the observing self that is conscious of these features but which cannot be observed itself – the self that is featureless, without boundaries or content.
>
> (88–89)

The breakthrough in both koan practice and psychotherapy is the conversion of the grasping, ontological self into an observing self that perceives and cognizes without grasping. The Zen tradition compares this observing self to a mirror that reflects but is not altered by the fact of reflecting. At the same time, often the term "mirror mind" is used in Zen practice to allow the state of equanimity to emerge in which there is no compulsion to grasp what is being perceived and cognized. This is the space of freedom of mental health in which the observing self stands free of the disputes of the neurotic self. In other words, one sees one's neurotic self in exactly the same way that a psychotherapist sees the patient's neurotic self or a Zen teacher sees the student's deluded self.

In the koan from the *Wu-men-guan* collection, cited at the beginning of this chapter, the monk is very consciously privatizing and privileging, in a public sphere, the ground of freedom and liberation – the observing self. His "practice" is to remain true to the cogitations of the observing self in which any grasping of any kind is a form of self-deception. Within the context of Zen practice, there is nothing more he can do than to position his awareness as the mirror which reflects but does not grasp. His mirror mind is the deconstructed space which is alive with potentiality and has razor-sharp vigilance about non-grasping. It is aware of its own positionlessness and yet allows the functional self to live seamlessly in the paradoxical inseparability of relative and absolute truths.

"Relative truth – the protocol of logic, distinctions, cause and effect – guides our everyday, conventional experience of ourselves and the world. Relative truth is the life of the individual and the dynamics of the individual mind" (90). But it does not overwhelm the deconstructed space of the observing self that refuses to grasp the phenomena presented to it in absolute terms. The path of awareness while living in a sea of relative truth is called *appamāda* or vigilant care in the Pāli discourses of the Buddha. Vigilant care is not reducible to a single state of mind, but describes a moral and psychological sensibility embodied above all by the Buddha himself. The vigilance that the monk in the koan under consideration is exhorting himself to attend to is not something that can be formulaic or even linguistic. It's not a game one plays with oneself but is the stuff of life itself. One needs to be vigilant enough to be aware of the workings of the neurotic self and yet relaxed enough to not buy into the construction of the ontological self. This is the deeper meaning of the term *upekkhā* or equanimity that's so central to Buddha's own version of mental health. This equanimity is possible only because the observing self or the

> true self that is no-self is a state of completeness, the sound of one hand clapping, the place to which the one returns that transcends all polarities, contradictions, and paradoxes of the self: good/bad, unity/disunity, assertion/denial, being/nonbeing.
>
> (90)

In psychotherapy, the freedom in the breakthroughs of psychotherapy is "a state of mind in which the self/other barrier dissolves, boundlessness becomes the

source of empathy and the transformational merging of patient and therapist" (90). The monk in the koan is, however, placing himself in the historical framework of the moral and psychological sensibility of the historical Buddha. His track of freedom or "Zen therapy" goes beyond transcending the imperatives of longing, clinging, and becoming to the freedom from the various constructions of selfhood that keep the neurotic self enslaved. His quest thus becomes spiritual or "religious" (with a small r) because it is encased in the intention of a total letting go of the constructed self.

Nishida Kitaro, the great Japanese Zen thinker of the early twentieth century, has tried to explain how one can live in the world of relative truth after surrendering one's ontological self.

> True religious feeling must be an absolutely humble attitude. It must be an attitude in which one has wholly effaced the self... Sacred religious feeling appears when one has abandoned one's entire person. When we know truth, we must abandon the self and conform to truth itself. To view a thing aesthetically must mean to submerge the self within the thing in itself.
>
> (Carter 1992: 117)

For Nishida humility seems to be an act of reimagination or re-embodiment of a deontologized self which is active yet free from the compulsions of the neurotic and the ontological selves. One need not agree with Nishida that this humility is a religious feeling per se but one can have an experience of the spaciousness and the freedom from mental afflictions it offers. Awakening is one half of the picture of mental health; the other half is being in the world with a moral and psychological sensibility that remains faithful to the deeper meaning of the surrender of the neurotic and ontological selves. The last (tenth) picture in the famous "Ox-Herding" pictures series of Zen tradition depicts the deconstructed self "entering the city with bliss-bestowing hands" or, to use another metaphor, "entering the marketplace with empty hands." In a truly successful conclusion of psychotherapy or koan practice there is a humbling both for the therapist and the patient, for the Zen teacher and the student in that both have participated in a profound breakthrough. This humbling combines with a profound sense of joy and appreciation for all concerned parties, and this is perhaps the humility Nishida is trying to convey. In any case, this humility is itself a carefully and consciously reconstructed self that exhibits a restored mental health in its relationships with the ten thousand things of the world.

## Note

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# 16

# BUDDHISM IN AMERICA

## The primacy of meditative practice

*Christopher D. Tori*

Through immigration and conversion, there has been a significant increase in the number of Buddhists in the United States over the past 50 years. Morreale (1998) found that more than 1,000 Buddhist meditation centers have been established in North America since 1985, and Wuthnow and Hackett (2003), in their research concerning the social integration of non-Western religions in the United States, noted the success of Buddhism in attracting American converts. Based on Putnam's (2001) Social Capital Benchmark Survey, it would be estimated that the number of non-Asian Buddhists in America is approximately 1.5 million. However, given the reluctance of most Buddhists to proselytize (e.g. in seeking information on "becoming a Buddhist," I was reminded by one monk that there was "nothing to become"), the actual number of native-born Americans who follow Buddhist principles in their daily lives is likely to be considerably higher than current estimates. In northern California alone, for instance, more than 250 Buddhist institutions have active programs of various sorts (Buddhist North American Directory 2004), and many of these establishments have very large followings (e.g. Spirit Rock 2004).

### Who are indigenous American Buddhists?

#### *People and institutions*

For the purposes of this presentation, a description of native-born (as opposed to immigrant) American Buddhists is presented. This depiction serves to illustrate emerging American manifestations of Buddhism rather than Asian practices. Wuthnow and Hackett (2003) have summarized the demographic and social characteristics of non-immigrant Buddhists living in the United States. Relative to the Christian majority, these individuals tend to have higher educational achievement and incomes. They are well represented among academic and professional groups, are more politically knowledgeable than the majority population, and they are more likely to vote. Unlike their Christian and Moslem peers, however,

they attend services less frequently and the majority of their friends typically have a religious orientation that differs from their own.

American centers of higher learning are major locales where Buddhist teachings are made available to the general population. The University of California library system, for example, lists nearly 8,000 titles. Some, like King (1999), have even suggested that "authentic" Buddhist teachings are most highly preserved in Western academic collections because of the extensive financial resources and scholarly expertise available in these settings. Additionally, most collegiate arts and sciences curricula include some instruction on Eastern philosophical and religious perspectives. Thus, many American Buddhists are likely to have first engaged in the study of Buddhism in academic environments.

Due to a common interest in the nature of the mind and ways to reduce human suffering, the relationship between American psychologists and Buddhist practitioners has been particularly close (Jinpa 2000; Hayes 2003). In a recent issue of the American Psychological Association's *Monitor on Psychology*, for example, the article "Tibetan Buddhism and research psychology: a match made in Nirvāṇa?" (Dingfelder 2003), has exemplified the interest of many professional psychologists in Buddhist practices. Discussions of Buddhist ideas concerning the nature of self-representation, cognitive control, equanimity, and compassionate living are likely to be found in psychology courses devoted to cognition, affect, and mental health.

Because many indigenous American Buddhists are highly schooled, research exploring the place of spiritual beliefs and practices among individuals of advanced education can provide one frame to better understand factors shaping the expression of Buddhism in America. The research of Zinnbauer *et al.* (1997) is instructive in this regard. These authors found that mental health workers, self-identified members of new age groups, and college faculty members all obtained much higher scores on measures of spirituality than traditional religion. In their investigation, the term spirituality included a sense of something more important than an individual's personal needs, a conjunction with the scared (in nature or with a higher power of some kind), and the integration of transcendental values with personal behavior. Traditional religion, on the other hand, typically encompassed organized church activities, the performance of rituals, and adherence to institutional beliefs and dogmas (557).

In earlier research (Kassinove and Uecke 1991; Eckhardt *et al.* 1992), it was also found that mental health professionals engaged in much less formal religious practice than the general population. Rioux and Barresi (1997) suggested that a scientific orientation (or ideology) was responsible for negative attitudes toward traditional religious practices and beliefs among those receiving extensive training in the technical and therapeutic disciplines.

It would be expected, therefore, that interest in past orthodoxy, ceremonious liturgies, and polytheistic tenets would be low in the American milieu. In many respects, contemporary Americans embracing "the Buddha, the Dharma, and the Sangha," are in the stimulating position of identifying the fundamental teachings

of the Buddha freed from extraneous cultural factors (e.g. particular styles of dress, language, local folklore and superstitions). Of course, much care must be exercised here in order to avoid losing any core teachings. But as Buddhism grows in America (and other Western nations), questions concerning what Aristotle (Metaphysics, VII) called "essence" and "accidents" are inevitable and healthy. It is possible, for example, that the adage, "The habit does not make the monk" may be meaningful as an American sangha eventually arises.

### *Sociocultural influences*

Many (e.g. Wulff 1996; Belzen 1997; Bellah 2003) have argued that all religious expressions are socially constructed phenomena. The fact that one can easily recognize Tibetan, Chinese, and Japanese Buddhist practices demonstrates the fact that societal traditions have influenced the ways the Dharma has been operationalized and promulgated in diverse national settings. It seems reasonable to assume that American Buddhists are finding culturally relevant ways to apply religious teaching in their daily lives rather than relying on oriental religious observances (Goldstein 2003).

But, what constitutes American culture? Obviously, it would be presumptuous to attempt a full exploration of this issue in a single chapter. Rather, given here are major psychosocial factors I believe direct the religious life of most American Buddhists. The specific areas reviewed are egalitarianism, Protestantism, individualism, and scientific reasoning.

### *An egalitarian religious community*

One way to understand the preoccupation of Americans with equal rights and democratic structures is the ongoing national healing resulting from the grim early history of slavery in a land supposedly dedicated to individual freedom (Mauk and Oakland 1995; Robinson 2001). The solution to this injustice involved America's most costly war followed by a *sequelae* of racial animosity and bitterness (Waller 2000). Arising from the nullified oxymoron of enslavement and "justice for all," has been a passion for equality in all aspects of living. Contemporary American Buddhists are, therefore, unlikely to embrace religious structures based on aristocracy and status (e.g. a privileged priestly cast), or deference. While deep respect may be paid to individuals, the idea of a class of people being superior to others is incompatible with the now more fully realized Jeffersonian value of comprehensive equality (Gabriel 1974).

### *Protestantism*

At its core, America is a nation steeped in the principles of Protestant Christianity (Ahlstrom 2003). From this perspective, one has direct contact with the divine without the need of intervening clergy or obligatory sacramental observances.

In other words, salvation does not come from rites performed by others, but from a personal encounter with the Creator followed by individual surrender to the transcendental. Also worthy of note was the abolishment of the celibate clergy norm, a single, supreme leader, and exclusive monastic communities by the Protestant reformers (McGrath 1999).

Given this background, it would be expected that the majority of native-born American Buddhists would show limited engagement with enigmatic ceremonies and devotional worship forms. Rather, an active and engaged laity would likely demand culturally relevant rituals designed to increase personal awareness and sanctity. To better understand the power of ethnologic symbols in religious rites, the work of Carl Jung (1964) on archetypes is recommended. Interestingly, as Jung would have predicted, many Buddhist "churches" in America have already taken on a Protestant look in terms of liturgical style and nature of the relationship between the congregation and the "minister" (Prebish and Tanaka 1998; Seager 1999).

### *Individualism*

The Calvinistic founders of the United States placed great emphasis on individual responsibility and accountability (Kuklick 2001; Nystrom 2002). These early Puritan leaders felt that a sign of divine approval came from successful endeavors, be they business or personal in nature (Schreiner and Ware 1995). Thus, Americans are consistently encouraged to achieve at utmost levels in whatever they do. Self-reliance and personal achievement are embedded in the culture (e.g. in proverbs and national heroes) and children are encouraged to individuate at an early age (Dunn *et al*. 2003). These factors support an investigatory attitude that encourages observant testing before making commitments. Because simple obedience and conformity are not highly valued among most people in the United States, the invitation to personally evaluate challenging Buddhist meditation practices would be appealing for many.

### *A scientifically informed society*

America has, and continues, to be profoundly influenced by the achievements of modern science (Kohlstedt *et al*. 1999). From the startling advances in medical treatments to the exploration of the universe, American scientists have been at the forefront of the empirically based transformation of human knowledge. Descriptions of the scientific method are plentiful with that of Shadish *et al*. (2002) being particularly thorough. While the complexity of scientific reasoning should not be overly simplified, there is general agreement that this epistemological process results in the parsimonious prediction of perceptible occurrences with ultimate proof requiring experimentally falsifiable propositions (Popper 1968; Kuhn 1970).

Although considerable tensions have existed between faith-based Christian dogmas and scientific thinking (Crawford 1997), this has not been the case with

respect to Buddhism. In this matter, much is owed to the efforts of His Holiness, the Dalai Lama, in encouraging a dialogue between Buddhist scholars and contemporary scientists. The recent textbooks of Davidson and Harrington (2002), Houshmand *et al.* (1999), and Wallace (2003a) exemplify the progress made in the way of dialogue and collaboration.

For many Westerners, particularly those lacking strong religious beliefs, the methods and assumptions of empirical science can take on an ambience of epistemological primacy and infallibility (Wilson 1998; Wallace 2003b). But as Trierweiler and Stricker (1998: ch. 3) have pointed out, when "science" is embraced in an uncritical way, rigid and dogmatic thinking can easily arise. As a result, one form of authoritarianism (e.g. that of religious dogmas) can simply be replaced with another (i.e. scientism), with neither being conducive to a vibrant intellectual life capable of nourishing personal growth and future paradigmatic revolutions. Such a state of affairs, of course, results in the stultification of knowledge as Wallace (2003b) has pointed out. Another contemporary view influencing American scientific thought is post-modernism (Gergen 1994, 2001; Stuhr 2003). Care must be taken that this perspective does not become so absolutist that it results in complete subjectivity and skepticism.

Even with the avoidance of extremes, the lenses of coherence, utility, and measurability will filter Buddhist teachings in America. Appeals to faith, authority, and tradition will likely be of limited value for the nation's majority who will demand rational proof before practices are widely adopted. Fortunately, Buddhism arose with an emphasis on enlightened rationality and pragmatism (Harvey 1990). It should not be forgotten that the Buddha taught in a magnanimous manner rarely telling others that their beliefs were erroneous. Those claiming the mantel of Buddhist authority should not disregard this legacy.

## The American philosophical landscape

Understanding the primacy of meditation practice among native-born American Buddhists lastly necessitates a very brief summary of the major components of American philosophical thought. As Kuklick (2001) has pointed out, philosophy and its "American-ness" are broad constructions (or metaphors) used to summarize, among other things, the implicit values and logical processes of a people embedded in their particular culture. Because America has been highly influenced by European ideas, some familiarity with occidental philosophical traditions would be helpful to readers. For a comprehensive description of the influence of Western philosophy on the development of American psychology, Edwin G. Boring's (1950) seminal text, *A History of Experimental Psychology* is recommended. Carl Norris (2001) has also presented a thorough review of Greek philosophical tenets and their impact on fundamental psychological concepts. In terms of the intersection of Buddhist concepts and Western reasoning, Masao Abe's (1986) *Zen and Western Thought* is particularly informative.

### *A fundamental underlying principle*

With a clear understanding that what follows is simplified for the purpose of general background information, it is contended that pragmatism (practicalism, utilitarianism) has, and remains, the Ockhams's razor of American philosophy. Begun by Charles S. Peirce (with roots extending back to Benjamin Franklin) and expanded and refined by American notables such as William James and John Dewey (instrumentalism), the development of pragmatic philosophical principles has been called an important contribution to world philosophy (Kuklick 2001: 177). Briefly stated, pragmatism holds that both the meaning and the truth of any idea are a function of its practical outcome. Springing from pragmatic premises have been functionalism, pluralism, and new insights into the complex nature of scientific inquiry (Menand 2001).

Obviously, much more could be said about the development of philosophy in America including its early Calvinistic character that spawned individualistic and assiduous ideals (Hamner 2003). American philosophers have also contributed much to theoretical narratives about political and social issues (e.g. freedom, justice) and they have been at the forefront of epistemological discussions regarding the nature and limitations of scientific knowledge. All of these issues, however, have been impacted by the American penchant for judging ideas by their practical benefits.

## Summary

I have reviewed research showing that the indigenous American Buddhist population tends to be highly educated, politically astute, and well integrated into the larger, non-Buddhist society. I also postulated that the majority of non-immigrant Buddhists in North America have pragmatic values including an admiration of scientific methods and reasoning. Thus, it is not surprising that the more ethereal Buddhist practices (e.g. worship of deities, performance of complex rites, highly deferential mannerisms) hold little attraction for a Western populace highly influenced by Aristotelian metaphysics and contemporary egalitarian thinking. Given these psychosocial and philosophical underlying American cultural values, it is evident that the cultivation of the mind in meditation would be a culturally appropriate entry vehicle for the indigenous people in this country to experience the core teaching of the Buddha.

These premises can also be cast by way of a supposition. It is always interesting to speculate on actions the Buddha might take if faced with a contemporary problem. How would he instruct Americans if he were alive today? As depicted throughout the Buddhist scriptures, he was a discerning and adroit teacher, able to utilize the native abilities of others in support of their search for enlightenment. The *Dhammapada* stories of Kisāgotamī (Dhp. 5.114) and Cūlapanthaka (Dhp. 5.25) are particularly instructive in this regard (Tin 1986).

What would be his approach to those who dwelt in a wealthy land with a history of many exemplary social and intellectual accomplishments? Perhaps, most

readers would agree that his initial encounters would not center on the manner of dress or the "correct" performance of ceremonies. Conceivably, he would begin with the "purification of the mind" through meditation. If the Buddha's intuitive wisdom is reflected, to some extent, in natural selection processes, then this course of action would have been taken, for it seems to be what is now happening.

## Quiet your mind and see what happens

The scholarly work of American Buddhists regarding meditation issues is now presented. However, before doing this, it should be emphasized that an "us and them" attitude between American and non-American Buddhists is in no way intended. To the contrary, it must be remembered that Buddhism in Asian settings has had thousands of years to develop and mature while American Buddhism, relatively speaking, is in its infancy. Almost entirely, Buddhism has been (and continues to be) introduced to Americans by Asian practitioners and this compassionate sharing is greatly appreciated.

## Outcome research using quantitative methods

### *Mindfulness meditation*

This practice, sometimes called Vipassana, is one of the oldest forms of Buddhist meditation consisting of the explicit noting of whatever arises in consciousness (Hart 1987; Nyanaponika 1988; Sole-Leris 1992). Mindfulness meditation, of course, is not a unified set of procedures and, in many Western settings, a blend of Eastern meditative techniques has been occurring (Goleman 1988). Generally, however, in American sites, Vipassana training begins with instruction on ways to gain reasonable control of the mind (*samādhi*) followed by the consistent noting of the content of one's mental flow. I believe Jon Kabat-Zinn's (1994) popular text, *Wherever You Go There You Are: Mindfulness Meditation in Everyday Life*, is a good reference capturing the fundamental content and style of Vipassana practice in the United States.

Of particular interest to American Vipassana researchers has been the nature of self-representation during intensive mindfulness practice (Walsh 1977, 1978; Epstein 1988, 2001; Muzika 1990). Although Buddhist teachings are clear in warning that attachment to an unchanging selfhood conception is an entrapping source of unhappiness (Fryba 1989; Harvey 1990; Sujiva 1990; Tori 2004), a number of Western researchers have reported negative psychological states during meditation retreats when participants are confronted with selflessness (*anattā*) realizations (e.g. Epstein 1990; Shapiro 1992a; Miller 1993). The fact that I did not find this phenomenon among large samples of Asian meditators (e.g. *N*s ranged from 719 to 170) using pretest–posttest control group experimental designs (Emavardhana and Tori 1997; Tori 1999; Thananart *et al.* 2000) is one source of

evidence that Vipassana outcomes (and, by implication, other forms of Buddhist meditation) will vary as a function of cultural factors.

I was not surprised, therefore, when one of my graduate students (Sterling 1996) found increased depression in an American sample of Vipassana meditators following a ten-day retreat conducted in a traditional manner (e.g. early rising, silence, and mindful movement). Sterling's findings support the contention that the modification of mindfulness meditation retreat procedures based on East–West cultural differences may be beneficial (particularly for new meditators). Perhaps, the slow moving, subdued nature of the typical Vipassana retreat is overly gloomy for many fast-paced Westerners.

The application of modified Vipassana meditation procedures by American physicians and psychologists working in medical settings has been a notably successful endeavor. The works of Deane H. Shapiro, Jon Kabat-Zinn, and Kenneth H. Kaplan are exemplary in this regard. At this point, it should be stressed that every study conducted by American investigators will not be presented in this chapter because of space restrictions. Rather, illustrative research showing how Vipassana meditation is understood and used by contemporary American researchers is given.

Psychologist Deane Shapiro (1992a) has provided important information on the occurrence of adverse psychiatric effects among Vipassana meditators finding this to be a common occurrence that is positively correlated with the amount of practice. Meditation teachers should be familiar with the nature of these mental health problems and receive sufficient training to provide meaningful assistance to those experiencing labile emotion during meditation. Familiarity with Miller's (1993) description of the uneasiness and apprehension associated with the recall of distressing memories during mindfulness practice is an additional resource in this regard.

Shapiro (1992b) has also provided descriptive information on motivations of long-term American Vipassana meditators finding that self-regulation, self-exploration, and liberation hold primary sway in this population. In a later study by Easterlin and Cardena (1999), greater self-awareness, positive mood, and acceptance were the obtained empirical correlates of extended practice. Finally, Shapiro has provided extensive information on the beneficial influence of Vipassana meditation on self-control and stress reduction (Shapiro 1992c, 1994).

Jon Kabit-Zinn is, perhaps, the most prolific quantitative investigator of the effects of Vipassana meditation, particularly for applications in medical settings with biological outcome variables. For example, with Richard Davidson and others (2003), changes in brain function and immune function enhancement were, for the first time, quantified in a group of mindfulness meditators. Of particular note was the increase in antibody titers to influenza vaccine among those in the meditation group relative to controls. A summary of the empirical work regarding the efficacy of Vipassana-based interventions in diverse medical settings has been prepared by Kabat-Zinn (2003). His work in reducing pain (Kabat-Zinn 1982; Kabat-Zinn *et al.* 1986) and anxiety (Kabat-Zinn *et al.* 1992) has had notable

heuristic value. Tacón *et al.* (2003), for example, have applied techniques given by Kabit-Zinn to reduce anxiety and stress among women suffering from heart disease with initial success. By way of general summary, Kabit-Zinn has established that mindfulness meditation techniques have a definite place in the treatment of a number of medical disorders.

Kenneth Kaplan has also used Vipassana practice to assist medical patients, particularly those suffering from fibromyalgia (painful muscles, tenderness, and chronic fatigue). A major study was done in 1993 based on 77 patients with this chronic disease. Following a mindfulness meditation stress reduction program, 51 percent of patients showed at least 25 percent improvement in at least half of the outcome measures (Kaplan *et al.* 1993). Since then, Kaplan has used other cognitive methods in the treatment of this often tormenting disorder.

Readers interested in a more comprehensive review of the efficacy of mindfulness procedures used in clinical settings should obtain Ruth Baer's (2003) meta-analysis of empirical research in this area. In addition to providing information on the variables used in studies, the nature of the control groups, and the research designs employed, meta-analytic procedures provide for the combination and contrasting of studies using effect size as the dependent variable for this purpose (Hall and Rosenthal 1995). In meta-analytic research, the systematic exploration of possible moderating variables on outcomes can be explored and Baer did this in a clear and coherent manner.

To some traditionalists, however, it may seem that Americans are reducing Buddhist religious practices to rudimentary psychotherapy methods. While English language texts comparing Buddhism and psychotherapy abound (e.g. Epstein 1996; Watson 1998; Hall 1999; Welwood 2002), these works do not minimize or negate basic Buddhist tenets. Rather, they demonstrate the growing appreciation of contemporary social scientists for long held Dharmic truths.

### *Zen*

As Roger Thomson (2000) noted, "...Zen is finding an increasingly warm reception among Americans in general, and psychotherapists in particular" (532). Perhaps, this has occurred because of its simplicity and emphasis on meditative practice. Whatever the reasons for its widespread acceptance, Zen centers can be found throughout America and they typically have extensive patronage (Morreale 1998; Seager 1999). As with Vipassana, a good deal of variability in Zen practices exist, but in the American context, stress is placed on attention to the here and now (e.g. breathing) and often koans (a type of question) are used to assist meditators extinguish rigidly held ways of thinking (Kubose 1980; Prebish 1999; Loori 2002). Among the various Zen orientations, the Soto and Rinzai schools are popular in the United States (Roshi 1989; Scott *et al.* 2003). Zen, of course, is most highly developed in Japan and neighboring countries and much of the empirical outcome literature has been produced by north Asian scholars. For the purpose of this chapter, however, only studies conducted by Americans are given.

As before, both positive and negative outcome research is presented. This is done for a number of reasons with the most important being an understanding that failing to reject the null hypothesis is not a "negative" result in empirical research. It should not be forgotten that falsifiability is the hallmark of modern science (Williams and Slife 1995). In fact, any body of literature with only affirmative outcomes would be highly suspect (i.e. likely being propaganda confounded by expectancy and demand factors and the suppression of conflicting findings). Thus, the first Zen study reviewed is one in which the expected outcomes did not occur.

With respect to negative findings, my student, Teresa Lesko (2000), sought to quantify the changes in inner-directedness (knowing one's values in decision making) and the ability to live within the present moment among 33 adults who participated in an intensive sesshin retreat at a Zen center in Berkeley, California. The dependent variables were chosen because of their predictive relationship with sound mental health (Brazier 1995) and with the basic Buddhist principles of right judgment and *kṣaṇikatva* (the axiom of momentariness). Meditation participants completed all measures on four occasions: (a) immediately before the retreat, (b) after the retreat, and (c) one and four months following the retreat. Controls ($n$ = 28) took the measures twice, about one month apart. The obtained data did not support any of the study's hypotheses (i.e. the null was retained in every case).

Rather than considering this well designed study a failure, the findings stimulated a great deal of thought among the candidate and her dissertation committee. First, the dependent variables may not have adequately accessed the constructs of interest. Given the complexity of the responses to Buddhist meditation (Walsh 1977, 1978; Miller 1993; Shapiro 1994), this explanation is worthy of consideration. Also as Compton (1991) had warned, for many Zen meditators, it is not possible to conceptualize their development in terms of simple questionnaire items. Even more important were considerations that Zen meditation practices may not be effective ways to change the study's variables. The ability to conceptualize in this manner is an important distinction between valid scientific inquiry (i.e. a method of assessing claims) and the selective uses of research findings for proselytizing purposes.

Other disconfirming research regarding the efficacy of Zen meditation exists. Goldman *et al.* (1979), for example, found that Zen meditation was no better than control treatment conditions in reducing anxiety and changing perceptual functioning. Earlier, Malec and Sipprelle (1977) concluded that Zen meditation produced only very small physiological changes in naïve, unpracticed participants. Not surprisingly, in 1985, after conducting a thorough literature review, Delmonte concluded that meditation did not appear to be more effective than comparative interventions in reducing anxiety. Hypnotizability and expectancy were cited as the likely mechanisms for observed changes.

Of course, many quantitative studies showing positive outcomes following Zen practice have been published. Gillani and Smith (2001) reported that Zen meditators obtained greater increments in a number of relaxation measures and

reduced worry when compared to controls. Interestingly, as Shapiro (1992b) observed, Zen meditators were more likely to have atheistic views than those who were not involved in meditative pursuits. In the inquiries of Compton (1991) and Smith *et al.* (1995), increases in measures of self-actualization and happiness among meditators were obtained while this did not occur for those in control groups. Zen meditation has also been shown to reduce depression (Tioczynski *et al.* 2000) and to affect personality functioning (de Grace 1976). Lastly, empirical evidence exists showing the benefits resulting from the integration of Zen principles in a number of psychotherapeutic intervention models (Murk and Hartzell 2003).

### *Tibetan tantric meditation*

In spite of its rising prominence in world Buddhism, quantitative research concerning the outcomes of Tibetan tantric meditation by American (and other Western) researchers is relatively rare. Perhaps, the ceremonial complexity and mystical nature of Tibetan tantric practices have distanced the laity from full participation in this religious expression. Some Western scholars like Andresen (2000), have even concluded that certain aspects of Tibetan meditation may remain beyond the grasp of empirical science. Given what was said about the nature of American culture, highly ritualistic and mystic factors would likely inhibit the wide embrace of such practices. Thus, it is not surprising that much of the research done by Americans on the outcome of Tibetan meditation has utilized monks from that country as participants (Dingfelder 2003).

Richard Page and his associates (1997, 1999) have done the only quantitative investigations of Tibetan meditation using Western participants (not always Americans). These studies are notable because of the long-term nature of the retreats (i.e. having a duration of four years). In spite of the many rigors of this experience, most participants were able to reduce their reliance on external factors in order to achieve their spiritual objectives.

An outcome study concerning Tantric Yoga meditation was also available and this research may be relevant to future investigations of Tibetan practices. Corby *et al.* (1978) quantified the physiological reactions of novice versus experienced meditators. Their findings were distinct from other research in that proficient meditators showed increased autonomic activation during practice while novice practitioners became more tranquil. Other outcome variables (e.g. EEG, heart rate, respiration) revealed that this form of meditation involved much more than relaxation (e.g. intense concentration, heightened awareness of bodily sensations). It seems likely that similar outcomes would be expected for Tibetan tantric meditators.

Wolf and Abell (2003) evaluated the effects of mantra chanting on stress and psychosocial factors based on Vedic assertions. Given the importance of this activity in Tibetan practice, their investigation may be predictive of future research utilizing chanted Buddhist liturgical techniques. Findings were encouraging

suggesting that maha-mantra practice offers significant potential in reducing nervous tension and depression and that it should be considered as one possible component of a spiritual approach to psychosocial treatment of some mental disorders.

In summary, only two quantitative studies of the outcomes of Tibetan Buddhist meditation retreats or intensive practice have been done by American researchers. Perhaps, this issue will be addressed in future international meetings and plans could be made to design quantitative outcome investigations of the changes occurring after tantric Buddhist meditation training and practice. I would like to join with others in this pursuit and would welcome collaborative relationships that would result in empirical papers concerning this topic.

## Phenomenological research and personal narratives

Care was taken to avoid epistemological extremes in this presentation of findings (i.e. assuming that only one method of inquiry provides acceptable or meaningful data). From a pragmatic stance, the examination of phenomena from multiple perspectives has many potential advantages. Thus, the qualitative, phenomenological research by Americans concerning meditation issues is presented along with personal narratives describing the meditative experiences of authors.

Based on the writings of the European philosophers Edmund Husserl and Martin Heidegger, phenomenological studies describe immediate experience with the goal of understanding rather than explaining the constituent phenomena of consciousness (Owen 1994a,b). Research of this type has the advantage of utilizing rigorous methods developed by American investigators such as Amadeo Giorgi (Moustakes 1994). Put very simply, consistencies among various descriptions are uncovered and presented in narrative form. Most textbooks concerning theories of personality will have chapters on existential-phenomenological psychology for readers who would like more details on this philosophical stance and its related methodology (e.g. Monte and Sollod 2002).

Closely related to formal phenomenological research are first person descriptions of experience. While these narratives lack an explicit data reduction method, they often provide insightful information on the thoughts and feelings of authors as they encounter new situations and circumstances. The personal reports of Americans regarding their reactions to Buddhist meditation have done much to demystify this method of spiritual expression and to encourage others to consider engaging in similar practices.

### *Mindfulness meditation*

The life and work of Jack Kornfield exemplifies many of the issues raised in this presentation. He had the benefit of being an ordained member of the monastic community headed by the famous Thai monk, Achaan Chah (1985) for a number of years. Upon returning to the United States, he became a layman, obtained

a doctoral degree in psychology, married, and subsequently devoted himself to teaching meditation (at Spirit Rock in Northern California) and authoring numerous texts on Buddhism and meditation.

In 1979, Kornfield published a phenomenological study concerning the experiences of American college students who had engaged in intensive Vipassana meditation practice. This early paper described the occurrence of unusual visual and auditory aberrations, a theme that has been noted by several Western meditation researchers. Many of Kornfield's subsequent books (e.g. 1993, 2001, 2002) have centered on helping people overcome the commonly experienced difficulties encountered during mindfulness meditation in order to gain the ultimate benefits of serious practice. Clearly, Vipassana training remains difficult for many (e.g. sustaining the concentration and attention necessary for successful outcome), insuring that devotional Buddhist religious expression will not disappear in America.

Other phenomenological inquiries regarding the experiences of mindfulness meditators have taken the form of doctoral dissertations. As previously noted, American universities and colleges are centers where Buddhist topics are widely investigated. Because of their number and issues involving difficulty of access, the current review of these works is limited. Of particular relevance to the discussion of factors related to successful outcome of meditation, is the study by Healy (2002). What must occur for major psychological change to occur following Vipassana practice? Much like the stages of change literature (Prochaska *et al.* 1994), five conditions emerged from interview data: (a) A feeling of readiness to engage in serious practice, (b) withdrawal from every day concerns, (c) realization of new insights during meditation, (d) learning how to apply fresh ideas in daily life, and (e) an enhanced sense of connectedness. Data analyses also revealed that transformative processes were not entirely rational in nature and that psychological change was grounded by increased awareness.

Several authors have provided helpful narratives describing successful mindfulness meditation. Walsh's (1977, 1978) early work was very important in this respect. Like Shapiro, Walsh was very sensitive to what physicians call abreactions (i.e. negative or undesirable responses to an intervention). His description of disturbing thoughts and fantasies that arose during his practice was both a warming to meditation teachers and a means to normalize such feelings among new meditators. Walsh then went on to show how, with patience and steadfastness, the sense of "I" could be deconstructed and replaced with an awareness of the fleeting nature of identity resulting in ultimate equanimity and greater clarity of thought.

Another seminal text described the reactions of a Western woman who engaged in concentrated Vipassana meditation in several Thai monasteries. Jane Hamilton-Merritt (1976) provided detailed accounts of her experiences from a feminine perspective. Her text is reassuring, joyous, and candid. Common illusions and altered states of consciousness are depicted and practical recommendations on ways to avoid regressive attachment to temporary rapture or to undo avoidance of meditation difficulties are given. The text is easy to read and many profound lessons are conveyed with humor and supportive gentleness.

Joseph Goldstein is yet another influential American Buddhist scholar and author. He began exploring mindfulness meditation while he was a Peace Core volunteer in Thailand and after extended meditation retreats in several Asian countries, he returned to the United States and cofounded the Insight Meditation Society. He has provided many rich narratives describing the ups and downs of meditative experiences, particularly those associated with retreats (e.g. Goldstein 1987). The writings of Jack Engler (1984, 1998), a Harvard psychologist, have also deepened an understanding of Buddhist concepts among many Americans with the Rorschach study of Brown and Engler (1980) concerning the stages of mindfulness among various groups of meditators being widely cited.

Many more descriptions of the experiences of Americans who have seriously engaged in mindfulness meditation are available. In terms of the purpose of this presentation, it is clear that a good deal of attention has been given to the complex reactions inherent in sustained mindfulness by Western meditators. As time passes, this body of literature will surely increase and hopefully it will make a significant contribution to the corpus of Buddhist knowledge.

### *Zen*

In spite of its popularity, published research concerning Zen experiences utilizing phenomenological methods by American authors is lacking, which makes future work in this area desirable. Descriptive texts about Zen meditation are plentiful, however. The natural place to begin is with the works of Alan Watts. After D. T. Suzuki, Watts has probably contributed more to the spread of Zen concepts in America than any other single person. Many consider his 1957 book, *The Way of Zen*, a classic. In later works (e.g. Watts 1973), he made seemingly alien and exotic practices attainable for ordinary persons. His other publications are overly numerous to list here, but suffice it to say he was an important Western Buddhist model for many Americans.

The description of James Patteson's (1998) personal transformation following encounters with Buddhist teachers and the practice of meditation is illustrative of Buddhism's impact on American youth during the 1960s and 1970s. The interactive forces of the search for peace during an unpopular war, psychedelic drug use, and interest in new religious ideas from Asia, influenced many young Americans during that turbulent period. For some, idealism, altruism, and the search for new meaning buffered misguided youthful adventures resulting in a generation open to multicultural experiences (Cobbs-Hoffman 2000). In many respects, the nation's youth needed alternative idealistic models given America's history of racism and international parochialism (Holland 1999).

Like many of his contemporaries, Patteson experienced a good deal of turmoil during his early adult years and began to search for purpose in a number of ways including alternative lifestyle experimentation in San Francisco's Haight-Ashbury district and in a new-age commune. He also had the fortune to meet several Zen teachers and began to reduce unnecessary suffering using Buddhist

techniques rather than drugs. His transformative psychological experiences occurred at the Minnesota Zen Meditation Center and at Naropa, a Buddhist University in Colorado. Following a seven-day intensive meditation retreat, his values and level of insight underwent dramatic change and he was better able to integrate Buddhist principles into his daily life. The dissertation ends with a discussion of how the practice of Zen yielded many personal, family, and professional benefits.

A very different Zen journey is provided by James Austin's (2002) exploration of neuropsychology, consciousness, and meditation. Austin, a neurologist and Zen practitioner, has explained the brain mechanisms associated with Zen meditative procedures in a clear manner. His use of personal narratives describing meditation experiences coupled with medical explanations of the likely mechanisms responsible for the typical reactions of practitioners is rare, making this text well worth reading. Austin's work exemplifies the potential coalescence of neuroscience and Buddhist meditation experience, a collaborative endeavor that has been recommended and supported by his Holiness, the Dalai Lama.

The examination of "*makyō*" (i.e. vivid images and sensations) in Zen meditation by Suler (1990) provides an additional perspective on an often unsettling aspect of intensive practice reported by Americans (and those of other nationalities). Using a psychoanalytic perspective, these intrusive perceptual phenomena were considered unconscious features of mind that become recognizable when uncensored attention is given to the ever changing content of consciousness. These often unpleasant images and sensations can provide important information concerning the fleeting nature of experience and, if handled with care and proper support, they can be stepping-stones to a more accurate understanding of the nature of reality including how the self is constructed.

As before, because of space and availability limitations, I have not included all of the American authors who have described their Zen meditative experiences. There is, for example, a growing body of literature concerning "Christian Zen" in the United States (Clifford 1994; Mitchell and Wiseman 1997), but a review of these ecumenical works would introduce another level of complexity into this presentation so they are only mentioned in passing. I hope, nevertheless, that readers have gained a clear sense of the interest in this area of practice by many American Buddhists.

### *Tibetan tantric meditation*

To date, American investigators have not conducted phenomenological studies of Tibetan tantric meditation. Even more surprising is the limited number of narratives by non-Tibetans concerning their personal experiences during and after tantric meditative practice.

Reginald Ray (2002) is an exception to this circumstance. He is unique in being a longtime student of Chogyam Trungpa Rinpoche and a senior teacher of Tibetan meditative practices in the United States. Ray's text is clearly written and

includes descriptions of meditative experiences occurring within the Tibetan context. Also presented is an articulate explanation of the conceptual foundations of many tantric practices. This book has been considered outstanding by a number of independent reviewers. Charles Tart (1994) has authored a more general text documenting the importance of mindfulness in daily life in which some Tibetan practices have been integrated. This work may be informative to Vipassana meditators interested in deepening their knowledge about tantric techniques.

Other descriptive works by Americans on tantric meditation experiences are not available, perhaps because Westerners rarely feel competent to present their thoughts and feelings in a coherent manner. Obviously, encouraging those interested in Tibetan tantric meditation practices to share their experiences, no matter what they may be, is highly desirable.

## Additional descriptions of Buddhist meditation by Americans

The literature concerning Buddhist meditation by Americans includes many works other than formal quantitative or phenomenological research and personal narratives. A large number of theoretical texts exist as well as explanations of how to carry out various meditation methods. The entertaining, but nevertheless insightful books, *The Complete Idiot's Guide to Understanding Buddhism* (Gach 2001) and *Buddhism for Dummies* (Landaw and Bodian 2003) exemplify the interest in Buddhism that is growing among Americans from all walks of life.

### *Mindfulness meditation*

As noted, interest in Vipassana is prevalent in America and many "how to do it" materials have been prepared. Smith-Jones (1998) and Rosenberg (1999), for example, have written user-friendly books introducing mindfulness meditation methods for those with little experience. Glickman (2002), on the other hand, has provided a much more detailed work describing advanced whole-body Vipassana methods based on time-honored Buddhist teachings. A few of the other very informative books explaining various ways to engage in mindfulness meditation are by Chodron (1996), Goldstein and Kornfield (2001), Langer (1989), and Moore (1995). Additionally, a large number of audio recordings have also been prepared for this purpose (e.g. Kornfield 2003).

Americans have, additionally, written numerous theoretical texts concerning Vipassana-mindfulness meditation. Among these are works providing information on the curative benefits of practice. Kabat-Zinn (1990) showed how observant living could have a significantly positive impact on overall physical health by reducing stress and enabling people develop more adaptive ways of living. In terms of mental health, Engler (1998) has integrated psychotherapeutic interventions with basic Buddhist principles and McAbee (2000) and Verni (2002) presented theoretical arguments for the usefulness of Vipassana in treating various psychiatric disorders.

Perhaps, at this point, there is a danger in becoming overly compulsive in enumerating the many textbooks, articles, and audiovisual materials produced by Americans on Vipassana meditation. Clearly, in terms of productivity and enthusiasm, mindfulness practice research has found a safe haven in America, which is not surprising given this country's cultural values.

### *Zen*

Theoretical literature produced by Americans about Zen meditation is also prodigious. From non-technical works such as Stephan Bodian's (1999) *Meditation for Dummies* to the more literary presentations of Bayda (2003) and Anderson (1999), theoretical explanations concerning Zen meditation methods are plentiful. The application of Zen methods in psychotherapeutic situations has a particularly extensive literature that has been strongly influenced by American authors. Explanations of topics such as Zen and therapeutic relationships (Rush 2000), breathing as a clinical intervention (Fried 2000), care of the dying (Barrett 1995), and the alleviation of psychiatric symptoms (Odajnyk 1998) have been prepared (to name only a few titles). Interestingly, many Zen and psychoanalytic scholars have developed close collaborative relationships (e.g. Magid 2000). Clearly, any American interested in Zen meditation need only to enter these words in an internet or library search and hundreds of citations and practice sites would be given. Like Vipassana, Zen has found a fertile home in the United States.

### *Tibetan tantric meditation*

As was the case for experimental and personal accounts, the theoretical literature concerning Tibetan tantric meditation is much smaller than is the case for the practice of Vipassana or Zen. As a general introduction to Tibetan meditation methods, the text by Ron Nairn (2000) is excellent. Because of his first-hand familiarity with tantric practices (he was trained by several Tibetan masters), his text conveys complex materials with clarity and grace. Robert Thurman (1995), who was also a Tibetan Buddhist monk for a time, has collected a number of sacred tantric texts that can be used in meditation. His latest work, *Infinite Life, Living Here and Now, Beyond and Forever*, has stirred considerable interest because of its integrative excellence, showing how transcendent virtues (*pāramitā*) can guide daily living and social transactions. Finally, the collaborative work between American born Joseph Arpaia and L. Rapgay (1999), a Tibetan monk, illustrating the many inherent benefits of tantric meditation is another highly informative text for the Western audience.

Several articles concerning the relationship between Tibetan Buddhism and psychological issues have appeared in the *Journal of Transpersonal Psychology*. Interesting parallels with Jungian concepts were drawn by Gross (1984) and Kalff (1983) while Metzner (1996) explained the meaning of the *maṇḍala* called the "Wheel of Flowing Together." Doctoral dissertation research centering on tantric

meditative practice has also been increasing (e.g. Ladner 1999; Negi 2000) and authors such as Alan Wallace (2001) have described the importance of empathy in the Mahāyāna tradition. A growing number of studies of the physiological correlates of Tibetan meditative practices have been undertaken (e.g. Newberg *et al.* 2001) and Terry Clifford (1984) has authored an informative text on Tibetan Buddhist medical practices. This particular area of research (i.e. physiological aspects of meditation practices) represents an emergent quarter of cooperation between Western scientists and tantric practitioners.

## Summary and conclusions

Buddhism is growing in Western nations including the United States and large numbers of indigenous people have embraced the principles of this way of life. Since religious expression is guided by culture, it has been argued that an American form of Buddhism is arising that will be characterized by its simplicity, democratic self-governing institutions, and a de-emphasis on the celibate, secluded monastic ideal. Evidence for the Americanization of Buddhism in the United States comes from many sources including the large number of meditation centers directed by American lay persons, a literature dominated by non-monastic authors, and the primacy of meditative practice over ritualistic religious expression.

The review of the research produced by Americans on meditation reveals a predominant interest in Vipassana (mindfulness) and Zen practices over tantric contemplative activities. This is not surprising given the overriding Protestant values of the nation. Because many American authors come from the health services professions (e.g. psychology and medicine), meditation has been seen as an important clinical and self-actualization intervention. Such applications, however, may alarm some traditionalists who fear that Buddhist teachings are being reduced to mental health exercises by Western converts. Clearly, continued dialogue between scholars with different perspectives remains an important goal that has been supported by His Holiness, the Dalai Lama.

Study of the physiological changes occurring during intensive meditation has been increasing and this has been an area of close partnership between Buddhist practitioners and scientific professionals. Rather than entering a somnambulant state, proficient meditators actually show heightened levels of awareness to mental and corporeal conditions. The neurology of meditation remains an intriguing area of investigation and exemplifies the general lack of conflict between Buddhism and science, something that has not occurred among the faith-based religions which have dogmatic canons.

In addition to documenting numerous positive effects, several American meditation researchers have noted common difficulties that arise during practice including labile emotions, physical pain, and intrusive thoughts. Meditation teachers, particularly those lacking training in mental health issues, should receive sufficient preparation to assist novice meditators with such problems.

The fact that not all meditation studies have yielded expected findings was seen as a positive outcome suggesting that investigators were adhering to the scientific tenets of objectivity and falsifiability rather than taking a propagandist stance (i.e. becoming religious apologists). Interest in the potentially beneficial, yet often distressing, deconstruction of the self (selflessness) has been of particular interest to a number of American researchers. In this matter, appropriate grounding is required for this process to be undertaken in a safe manner.

Following the examination of the body of literature on Buddhist meditation produced by American authors, it is clear that this religious/spiritual practice is vibrant and growing in the United States (and several other Western countries). It seems likely that, for the majority of Americans, meditation will be employed to reduce unnecessary suffering through mental control rather than seeking union with transcendental beings. I believe contemporary Western Buddhism will continue to primarily center on a mental way of life aimed at producing equanimity and ethical behavior for quite some time. In the future, it is possible that an American equivalent of the sangha will arise being characterized by gender neutrality with many scholar monks (male and female) collaborating with rather than directing a knowledgeable and active laity. These latter points, of course, are speculative at this juncture in time. Whatever the future may bring, it is a great privilege to be part of the early community of American Buddhists giving shape to this long-established way of life in a new cultural setting.

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# 17

# DESTRUCTIVE EMOTIONS

*Daniel J. Goleman*

## What are destructive emotions?

There is no doubt that destructive emotions are a great cause of suffering. In History's steady stream of callous cruelty, hatred spurs lethal action. Of all the destructive emotions, ruthless hostility stands out as the most troubling streak in the human psyche. The common challenge for humanity then is to understand the roots of destructive emotions and find ways to keep cruelty at bay.

This chapter summarizes discussions during a week-long meeting between the Dalai Lama and a group of scientists, wherein we examined the interaction between destructive emotions, which spawn ruthless and hostile acts. During our meeting, we explored how destructive emotions eat away at the human mind and heart and what we might do to counter this dangerous streak in our collective nature. And of course, we did so with the Dalai Lama, whose life is an object lesson in handling historical injustice. The Buddhist tradition has long pointed out that recognizing and transforming destructive emotions lies at the heart of spiritual practice. From the perspective of science, these same emotional states pose a perplexing challenge: These brain responses that have, in part, shaped the human mind, and presumably played a crucial role in human survival. But now, in modern life, they pose grave dangers to our individual and collective fate.

Our meeting explored a range of urgent questions: Are destructive emotions a fundamental, unchangeable part of human legacy? What makes the urges so powerful, leading otherwise rational people to commit acts they later regret? Are destructive emotions essential for human survival? How much plasticity might there be in the brain? How can we overcome them?

Buddhism has, as a pivotal assumption, the need to overcome the destructive pull of what Western psychology calls "emotion." But the Buddhist analysis draws the boundary around these harmful emotions differently than does Western thought, seeing them as afflictive states of mind that obstruct clarity and emotional equilibrium and interferes with spiritual progress.

Consider Mathieu Ricard's comments about emotion: "The English word 'emotion' comes from the Latin root *emovere* – something that sets the mind in motion, whether toward harmful, neutral, or positive action. In Buddhist terms,

on the other hand, one would call emotion something that conditions the mind and makes it adopt a certain perspective or vision of things. It doesn't refer necessarily to an emotional burst arising all of a sudden in the mind – which may be the closest to what scientists would study as an emotion. In Buddhist terms, such an event would be called a gross emotion – when for example, it's clear you are either angry, or sad, or obsessed.

"How, from the Buddhist point of view," Ricard continued, "does one distinguish between constructive and destructive emotions? Fundamentally, a destructive emotion – which is also referred to as an 'obscuring' or 'afflictive' mental factor – is something that prevents the mind from ascertaining reality as it is. With a destructive emotion, there will always be a gap between the way things appear and the ways things are."

Ricard comments, "Excessive attachment – desire, for instance – will not let us see a balance between the pleasant and unpleasant, constructive and destructive, qualities in something or someone, and causes us to see it for a while as being 100 percent attractive – and therefore makes us want it. Aversion will blind us to some positive qualities of the object, making us 100 percent negative towards that object, wishing to repel, destroy, or run away from it."

"Such emotional states impair one's judgment, the ability to make a correct assessment of the nature of things. That's why we say it's obscuring. By contrast, constructive emotions go with a more correct appreciation of the nature of what one is perceiving – they are grounded on sound reasoning."

Unlike the Buddhist approach, the Western approach contrasts emotions that are pleasant – positive – with those that are unpleasant – negative. The principle in the West boils down, it would seem, to whether an emotion feels good or whether it can lead people to harm themselves or others. Moreover, "Some psychologists," noted Richard Davidson "have suggested that emotions are destructive when they are experienced in inappropriate or non-normative contexts. When fear, for example, is experienced in a familiar situation where there is really nothing to be afraid of, then it's destructive."

Interestingly, the English term for "emotion" has no direct Tibetan equivalent and the Dalai Lama suggested we clarify this basic issue. The challenge was to find analytic precision in the Tibetan terms corresponding to "emotion" as used in English. After some (discussion) we arrived at a working definition: An emotion is a mental state that has a strong feeling component.[1] Destructive emotions on the other hand, are those emotions that are harmful to oneself or others.[2]

## The universality of emotions

During the second day of the meeting Paul Ekman discussed the results of his research on emotions, "In the West," noted Ekman,

> one of the things we say that distinguishes emotion from other mental phenomena is that an emotion can occur very quickly. It can begin in a

> fraction of a second (even though in some people it often takes much longer). A second distinguishing aspect is automatic appraising. The evaluation that turns on an emotion happens so quickly that we are not aware it is occurring. We are not witness to the process of evaluation that generates the emotion. We typically become aware that we are afraid, or angry, or sad, after the emotion begins, not before. The moment we become aware is a half second or a quarter second after the emotion begins, not before. That's what we mean by automatic appraising.

In other words, we can be in the grip of an emotion before we have noticed it starting. Paul continued, "A person typically becomes aware once the emotion begins. It focuses and commands attention once it starts but not during the process that generates it. Our lives would be enormously different, for good and bad, if we were actually consciously evaluating, becoming responsible for the start of each emotion. Instead, people feel as if emotion happens *to* us. I do not choose to have an emotion, to become afraid, or to become angry. I am suddenly angry. I can usually figure out what someone did that caused the emotion, but I am not aware of the process that evaluates, for example, what Dan did that made me angry.

This is a critical issue in the Western understanding of emotion, that the beginning moment – a crucial process – is something that we can only wonder about, but we don't know. We only become aware once we're in the emotion. We're not the master of the start."

"I wonder," the Dalai Lama commented, "whether there might be an analogous situation in meditative practice in which you cultivate an introspective ability to monitor your own mental state. You are especially on guard, on one hand, for the occurrence of excitation, when the mind becomes agitated or distracted, or, on the other hand, when the mind succumbs to laxity and starts to fade out and lose its clarity. As you're developing this introspective ability, in the earlier phases when it's not so refined, you are able to ascertain the occurrence of either excitation or laxity only after it has arisen. But as you get more and more adept at this and you cultivate it more and more finely, you are able to discern even when the laxity or excitation is about to arise. It is similar for the arising of attachment or hostility as well."

"This is an important issue," Paul replied. "It is something we know very little about. But I hope to get to some ideas about how to increase our ability to know the appraising process."

Alan, translating a point that the Dalai Lama had made a few moments before, said, "according to Buddhist psychology, this ability – introspection, the monitoring of one's own mental states – is said to be a derivative of intelligence." In the emotional intelligence model, self-awareness – including the ability to monitor our emotions – represents the fundamental skill needed in order to be intelligent about our emotional life. Ideally, this would include detecting destructive emotions while they were beginning to build – as the Dalai Lama said meditative

practice allowed – rather than only after they have captured our minds; if we can become aware of destructive emotions as they are first stirring, we have maximal choice about how we will respond to them.

Paul continued, “emotions are public, not private. By that I mean that the expression signals to others, in the voice, face, and in the posture, what emotion we feel. Our thoughts are private; our emotions are not. Others know how we feel – and that is very important for how people get along with each other.”

In the Buddhist view, thoughts are considered to be normally laden with emotions, and emotions are invariably laden with thoughts; moreover, the Tibetan term for thought includes its affective tone. The Tibetan system does not hold to the sharp distinction between thought and emotion made in the West, but rather understands them to be intertwined – a view closer to the reality modern neuroscience is discovering in the brain[3] “Many thoughts involve emotions,” Paul acknowledged, “but not all thoughts.”

“In the Buddhist context,” the Dalai Lama said, “there is often an attempt made to understand the causal relationship between emotions and thoughts. In many cases, we have a powerful emotion that gives rise to a certain intention, so often emotion proceeds the thought or acts as a catalyst for it. In Buddhist moral philosophy we speak of three types of unvirtuous mental states, two of which are closely related to emotions. One is covetousness, and another is ill will. Covetousness is generated by a powerful attachment to a given object. That attachment then gives rise to the thought ‘I want that.’ Covetous could also be aroused by anger and other emotions. Similarly, anger and hatred often give rise to ill will with their associated thoughts; the point here,” the Dalai Lama clarified, “is that emotion seems to precede thought.”[4]

Paul then mentioned, “When an emotion begins, it generates changes. It generates changes in our expressions, our face, our voice, changes the way we think, impulses to action and emotions can be very brief. It is possible for an emotion to last no more than a second or two. I can be happy one moment and angry the next: what I have been describing is really an evolutionary view of emotion. Darwin said that ‘all sentient beings developed through natural selection in such a way that pleasant sensations serve as their guide’, that our emotions evolved over the course of our history to deal with the most important issues of life – with child rearing, friendship, mating, antagonisms – and that the function of emotion is to get us moving very quickly without having to think.

Darwin also held that there are different emotions. They are not simply positive or negative emotions. Each emotion has its own signal and purpose. The question then becomes, how many emotions are there? So I’ve listed those for which there is good scientific evidence anger, fear, sadness, disgust, contempt, surprise, enjoyment, embarrassment, guilt, and shame. Each of these words stands for a family of emotions – not just one emotion. There is for example, a family of anger feelings.”

Paul continued, “Moods are not on the list. Moods are related to but different from emotions. Emotions could come and go in a matter of seconds or minutes, but a mood can last a whole day.”

"How would you define mood?" the Dalai Lama asked. "Is it an impact left over from an emotional occurrence?"

Paul responded, "That question relates to the second way moods differ from emotions. Usually when we have an emotion we can say what produced it. We can specify the event that triggered it, that brought our emotions forth. Often with a mood we can't. We wake up in an irritable mood or in a very positive mood; I believe these moods are produced by internal changes that do not relate to what is happening to us on the outside."

"That is one way a mood occurs, but there is a second way: if we have a very dense emotional experience. If we experience amusement again and again in a short period of time, the consequence will be a very euphoric mood. If we are furious again and again, we will then have a long period in which we are irritable." I asked, "Couldn't there be background thoughts that continually trigger a mood that we're not aware of?" I was thinking of cognitive therapy, which holds that distressing motions are triggered by subtle thoughts in the mind's background – and that bringing those thoughts into awareness offers a way to free ourselves from their control.

"There certainly could be," Paul agreed. "We don't really know as much about the causes of moods as about the causes of emotions." Alan then asked "And what if one were in an ongoing abusive relationship, couldn't that lead to a mood?"

"That would be a mood produced by the dense emotional experience," Paul answered.

"But it would be an identifiable trigger," the Dalai Lama observed.

"Yes," said Paul. "When a mood is caused by the second path, dense emotional experience, then you know why you're in that mood. When we're in a mood it biases and restricts how we think. It makes us vulnerable in ways that we are normally not. So the negative moods create a lot of problems for us, because they change how we think. If I wake up in an irritable mood, I'm looking for a chance to be angry; the danger of a mood is not only that it biases thinking but that it increases emotions."

There ensued a side discussion in Tibetan among the Dalai Lama, the lamas present, and the translators, at which point Alan commented, "They're looking for the Tibetan equivalent of 'mood'."

"We are grappling with how to explain that moods occur spontaneously, inexplicably," Jinpa explained.

The Dalai Lama explained: "There must be conditions, even though they may not be obvious to us. Buddhist psychology has concepts for the cause and mechanism of the arising of anger. The term used for what gives rise to anger is literally translated as 'mental unhappiness,' but that's not it really. It's an abiding sense of dissatisfaction. When you have that dissatisfaction, then you can readily become irritable. You are immediately prone to anger. I wonder how close that is to your concept."

"That sounds very close to me," Paul agreed. "In Buddhist psychology," the Dalai Lama continued, "there is an understanding that many of these emotions

need not necessarily be manifest. In fact, the emotions themselves may be felt or experienced, but they are also present in the form of habitual propensities that remain in the unconscious, dormant, until they are catalyzed."

Here I interjected, "The Pali term is *anusayas*, 'latent tendencies'." This concept in Buddhist psychology holds that the mind harbors propensities for different emotional states, including the destructive ones, due to past experiences that have built up into mental habits.[5] These latent propensities are seen as why, if strong anger comes on one occasion, it can come later, on another, more easily or strongly – even if in the meantime it fades completely and is replaced by loving compassion or forgiveness. Given the right triggering circumstances, the latent anger can come back full strength. In the Buddhist ideal of eradicating destructive emotions, even these latent tendencies need to be uprooted.

Paul then commented on love,[6] "I try to distinguish the three kinds of love, and I wish we had a different word for each in English. There is parental love. There is loving friendship. And there is romantic love," Paul added, "often the shortest of the three,"

"Wouldn't romantic love be a subdivision of loving friendship?" the Dalai Lama asked.

"I don't believe romantic love survives," Paul continued, "unless loving friendship develops – it provides the structure: loving friendship doesn't always develop, and then romantic love doesn't survive. Romantic love has two additional ingredients. One is sexual intimacy, which you don't have in a loving friendship, and the other, normatively, is the creation and raising of children in a long-term relationship. These types of love are contexts in which many emotions are felt."

"Where does compassion fit? Is it an emotional trait? Is it an attitude and not a trait? Compassion certainly seems to be a condition in which you are responsive to the emotions of others. You are able to appreciate and know what they are feeling, but it is more than just empathy. Why is it not easy to acquire? Can anyone become compassionate? Can some people learn compassion more easily than others, and if so why? The closest model that I can think of for compassion," Paul noted, "is the absorptions and unconditional concern that exists between a mother and infant; it prohibits many negative actions from occurring."

"Paul, even in Buddhist texts, that's the model that is used," said the Dalai Lama. Alan then elaborated, "In a common Tibetan meditation on compassion, you view all sentient beings as if they were your mother, the person who has shown you the greatest love and compassion."[7]

"The technical definition of compassion," Matthieu clarified from the Buddhist perspective, "is the wish that others may be free from suffering and the causes of suffering, while love is defined as the wish that others be happy and find the causes for happiness."

In returning to the mechanics of emotion, Paul acknowledged that science knows little about how emotions are triggered but that it seems to happen automatically, with their initiation occurring out of our awareness. That is why emotions can take us by surprise, coming unbidden into our awareness. The

question is whether we can do anything to change the original appraisals that trigger them, so that they become less automatic. That might give us more time between the impulse to act on them and our actual reaction – and therefore more chance to make a more measured response.

Paul explained, "It is not the time from impulse to action that is so critical, but from appraisal to impulse. That is an extraordinary and very important difference." In short, there are two places where consciousness, awareness of what is happening, could make a difference in our ability to regulate destructive emotions. For example, someone rudely steps in front of us in a line. When that occurs, an appraisal evaluates that person's actions: He is being rude. If we were witness to that appraisal, if we were aware of it as it is happening, we might be able to influence it by talking back and questioning the assumption, noting perhaps that the person did not see us, or that it does not matter enough to become angry. Call this "appraisal awareness." Paul however, expressed little hope that it can be achieved, because appraisals usually happen too quickly, and in areas of the brain that operate out of our awareness.

The appraisal, Paul continued, has already occurred (that person acted rudely and unfairly), and now an impulse to action occurs – say, to curtly object to what the person has done. Here, Paul observed, is the second opportunity for awareness to allow us to make a choice. We might learn to be aware of such impulses and to be able to deliberately evaluate them as this point, and choose whether we wish to proceed and act on the impulse. This "impulse awareness," Paul believed, may be achievable for some of us some of the time – but it is not easy to achieve and will take practice.

A moment or two later when we have begun to speak, we hear our voice, we feel the tension in our body, and before more than a word or two get out, we have some awareness of what is happening. At this point that capability to observe ourselves as we are acting allows us a third choice point. Paul called this "action awareness," the ability to monitor our actions and interrupt or modify themes – emotional habits – as they are occurring.

The question is how to educate our awareness so that we strengthen the ability to monitor our appraisals and stretch the time between impulse and action. Here Paul was taken by what he had been learning about mindfulness meditation, a Buddhist practice that trains the ability to monitor what goes on in one's mind. As Paul understood mindfulness meditation, it offers a means of obtaining action awareness and impulse awareness (though he wonders if it can achieve appraisal awareness). Other techniques he believed might be helpful in achieving action awareness include learning to be more sensitive to the feedback from our bodies about what we are feeling and doing.

Paul commented, "I'd like to come back to a point that His Holiness raised: that there is an important difference between the regulation of our response before and during an emotion. There are three different mental processes. The goal is to not become emotional about things and then say to yourself afterward, 'Why did I get angry about that? Why did that frighten me?' "

"But if you can't achieve that goal, then the second goal is to not act on the emotion, not let it adversely affect others. And if you can't achieve that goal, then the last is to learn from it in the hope that you'll do better next time. The first step is, I think, the real goal.

One of the reasons we have so much difficulty once we become emotional is that the emotion itself enslaves us. There is what I call a 'refractory period', in which new information doesn't enter or, if it does, our interpretation is biased and we only regard the world in a way that supports the emotion we are feeling. That refractory period may be only a few seconds or it may be much longer. As long as it is occurring we can't get out of the grip of that emotion. That doesn't mean we have to act on it, but it is still seizing us. When the refractory period ends, the emotion can end."

"In concluding, I want to say that after spending more than thirty years studying emotions, I am impressed by how little we still know about them; we have only begun. I would now like to quote from Charles Darwin, 'The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as this is possible of all outward signs of an emotion, softens our emotions. He who gives way to violent gestures will increase his rage. He who does not control the signs of fear will experience fear in a greater degree, and he who remains passive when overwhelmed with grief loses his best chance of recovering elasticity of mind.' "

## Cultivating emotional balance

"How do you define mental health?" During the second Mind and Life conference, in 1989, Alan Wallace had posed this question to Dr Lewis Judd, the director of the federal psychiatric research center, the National Institute of Mental Health. Alan was stunned to find that there was no clear answer from the Western perspective. Mental health per se had not been studies in psychiatry. Instead the focus of research had been on mental disorders, and mental health was defined, largely by default, as the absence of psychiatric illness. The tools offered by psychiatry are intended to attack the symptoms of emotional suffering, not to promote emotional flourishing.

In Buddhism, by contrast, there are many clear criteria for mental health and social well-being, as well as a set of practices for achieving it. When it comes not just to understanding mental afflictions and how to grapple with them, but also how to move into exceptional states of mental health, Buddhism has an enormous amount to offer the West.

During the afternoon session, the Dalai Lama returned to the crucial difference between the Buddhist and the scientific views: the criteria by which an emotion is judged to be "destructive." While the scientific standard was whether an emotion is harmful to oneself or to others, the Buddhist rule of thumb was far more subtle: Emotions become destructive the moment they disrupt the mind's equilibrium.

"The criterion I am using to distinguish between constructive and destructive emotions," the Dalai Lama explained, "is right there to be observed in the moment when a destructive emotion arises – the calmness, the tranquility, the balance of the mind are immediately disrupted. Other emotions do not destroy equilibrium or the sense of well-being as soon as they arise, but in fact enhance it – so they would be called constructive."

"Also there are emotions that are aroused by intelligence. For example, compassion can be aroused by one pondering on people who are suffering. On the other hand, the consequences of anger – especially its long-term effects – are that the mind is disturbed.[8] Typically, when compassion moves from simply a mental state to behavior, it tends to manifest in ways that are of service to others, whereas when anger goes on to the point of enactment it generally, of course, becomes destructive. Even if it doesn't manifest as violence, if you have a capacity to help, you would refrain from helping. That too would be a kind of destructive emotion."

The Dalai Lama opined, "My conjecture, in terms of trying to understand why the West places such a strong emphasis on identifying emotion, is that going back to the Enlightenment, there is an enormous priority placed on reason and intelligence. What can impede reason? Emotion.

You have two categories that are set in opposition to each other. The fact that there is a specific term for emotion in Western thought does not necessarily imply that there was a special emphasis placed on understanding the nature of emotion. Perhaps initially the motive for labeling something as emotion was to enhance reason by identifying something that is unreasonable, something irrational."

Indeed, the Dalai Lama's challenge to the West's separation of emotion and cognition has support in current findings from neuroscience. The brain, it seems, does not make any clean distinction between thought and emotion, as every region in the brain that has been found to play some role in emotion has also been connected with aspects of cognition. The circuitry for emotion and for cognition is intertwined – just as Buddhism posits that these two elements are inseparable.[9]

Paul then interjected, "I wonder if there are aspects of emotional experience that you can't comprehend without certain preparation. Might there be ways of experiencing emotion for those who have been practicing Tibetan Buddhism that are not available, and in that sense incomprehensible, to those who have not?"

The Dalai Lama agreed, in principle, "that there might be certain aspects of emotion that are incomprehensible unless you have experienced them yourself. For example, an important aspect of Buddhist meditation practice is reflection on the transient nature of life, on death, on impermanence. It is said that the more you prolong your meditation, the more you deepen your understanding and realization. At first you understand it intellectually that moments are changing, but you do not feel it. Then you familiarize yourself with this through meditation, and eventually a strong feeling develops. That kind of subtle emotion comes through meditation."

I then asked the Dalai Lama if there were any practical issues that he felt we ought to focus on. The Dalai Lama thought for a moment and said, "One of my

strongest convictions is that a deeper understanding of the nature of our mind, the mental states and emotions, must lead to the development of some kind of educational philosophy."

"The point you make," Paul said, "is to educate our emotions. There are two different levels of this. One begins with early development – educating children. But then the rest of us – we're no longer children, but adults. How can we educate our emotions?"

"Your Holiness," I said, "one reason we want to have this dialogue with you is that even within the secular context, there are things to learn from Buddhist insights and Buddhist practice that could be applied, free of Buddhism, to the human emotional reality. So, when someone is caught up in an emotion and very angry, what can be done from a Buddhist perspective, to shorten that period or to help free themselves from it, whether after, during, or even before?"

The Dalai Lama then asked the Thai monk, Venerable Kusalacitto, "It would be very good now to go to a practical note on the cultivation of mindfulness and how that pertains to emotion." To that I added that mindfulness could lend itself to a secular approach to destructive emotions, since it can be learned without becoming Buddhist.

*Bhante*[10] Kusalacitto then began a short but classic synopsis of the Buddhist view. "According to the Satipaṭṭhāna Sutta, the Buddha advises that you must be mindful and aware in the moment when you see the image, hear the sound, or come into contact with any tangible object. If you can hone mindfulness and awareness, then you will see the color or the sound as it is. You will not attribute misconceived qualities such as good or bad, beautiful or ugly, a sweet sound or an ugly sound. Your mind will stay very calm."

Then Venerable Kusalacitto went on to detail another aspect of mindfulness, concentration, in which the focus stays on a neutral object of awareness, typically the natural flow of the breath, and so wards off destructive emotions by blocking them. "We can say that you have selected an alternative object in the mind. Instead of anger, envy, or aggression, now your mind has focused on a neutral object of awareness." He summed up, "So in *satipaṭṭhāna*, you first cultivate mindfulness and awareness, by focusing on the body, on breathing in and out and focusing mindful awareness on your sensations. Then once you focus your mind, your mind itself can become the object of mindfulness. You can know, in that moment, if your mind is associated with anger, jealousy, greed, hatred, or delusion – or not. You're aware of whatever arises in the mind." Once this highly precise and focused awareness has been cultivated, there eventually comes a level of equanimity and invulnerability to destructive emotions. At this point in mindfulness, he said, "You simply recognize whatever comes up in the mind as a natural process. Arising and passing away – it does not stay forever. That's the technique as the Buddha described it."

The last level of mindfulness, as Venerable Kusalacitto explained, bespeaks a point at which perception has become so refined that a person can break the link between the initial sensory impression and the mind is moving toward labeling

and reacting to it. Instead of seeing the world through the prism of our habitual categories and knee-jerk emotions, the mind can stay in a neutral mode free of automatic habit.

I knew that Francisco Varela had been doing research in these very processes in perception and so I asked him, "Francisco, does the strategy as just articulated by Venerable Kusalacitto, of being mindful at the moment of first sensory contact, thereby negating the need to go through the cycle of labeling, of having a word for what we experience, make sense in terms of how we understand what happens in information processing?"

"Let's say we were to apply a strategy for learning through mindfulness," Francisco replied, "in terms of what Paul was saying this morning, to catch the impulse before it becomes expressed. Then you have a very short window of time. From the scientific point of view, there is no notion that tells us we can actually lengthen this moment, to catch the impulse before the expression comes about. That idea has never entered the scientific literature."

"When somebody gets very highly trained to make that kind of fine discrimination, would it be reasonable to say that in fact this process has been slowed down, or is it that the intelligence has become sharpened or more quick to act? And from a scientific point of view, is there a way we could distinguish that? What would we look for?"

The Dalai Lama responded, "It is actually a matter of an individual sharpening the faculty of discernment. However, it is possible for the process of the arising of an emotion to be slowed down. There should be some scope here for dealing with mental afflictions. In Nāgārjuna's *Fundamentals of the Middle Way*, he presents a causal mechanism of how afflictions arise in us, at the root of which lies grasping at some kind of intrinsic reality of things. Of self and other, and self in the world. Then when you interact with the other, or the world in relation to a given object, you start projecting. There is a causal mechanism, and so, from the Buddhist point of view, even though the process normally happens very fast, it is conceivable that for a highly trained meditator it would be possible to discern the cause and the processes of projection."

To that, Francisco responded, "Logically, then, that should be reflected in the way the process happens, physically and in the brain. We should see different changes." The Dalai Lama noted, "We don't know whether you will actually be able to find a brain correlation for reification as opposed to apprehension because the point here is to apprehend an object. It doesn't necessarily mean that you reify it. Whether you can actually distinguish that is the brain remains to be seen."

"In terms of precise analysis, what takes place in apprehending a flower?" In the very first instant you simply apprehend the flower itself, without reification. That is a valid cognition. But normally speaking, in that second instant, there is the reification of the flower, and as soon as that reification takes place, then you're into false cognition.[11]

"So, Francisco," the Dalai Lama concluded, "it remains to be seen whether you can find the precise neural correlation of the mere apprehension of the flower,

versus the very next instant of the reification of the flower," to which Francisco commented "Interesting experiment, no?"

## The neuroscience of afflictive emotions

"One of the most important things that we've learned in neuroscience," explained Richard Davidson, "is that any kind of complex behavior, such as emotion, is not based in a single area of the brain. Rather, many parts of the brain work together to produce complex behavior. There is no one center for emotion." "Richie," as he is known to his friends and associates, then focused on areas of the brain relevant to the destructive emotions and their regulation. He pointed out the frontal lobes, which are the brain's executive center and play a role in regulating emotions. He then called our attention to another key region for emotions, the amygdala, buried within the middle of the brain in the region known as the limbic system. "The amygdala," Richie said, "is very critical for certain kinds of negative emotions, particularly fear."

Davidson continued with his neuroanatomy overview by moving on to the hippocampus, a long structure just behind the amygdala that has been linked to memory. As he noted, the hippocampus has an important role in emotion because it is essential for our appreciation of the *context* of events. "In both depression and posttraumatic stress disorder it has been found that the hippocampus actually shrinks. But there are new findings indicating that when depression is treated with antidepressant medication, it prevents the atrophy of the hippocampus that typically occurs if the depression goes untreated.[12] So there is considerable plasticity in this structure."

"Your Holiness," Richie addressed the Dalai Lama, "one of the most important human qualities maybe our ability to regulate emotion – and here the frontal lobes appear to play a key role. Likewise, the frontal lobes are involved in much emotional dysregulation – destructive emotions. One of the most exciting discoveries in neuroscience over the last five years is that the frontal lobes, the amygdala, and the hippocampus, change in response to experience. They are the parts of the brain dramatically affected by the emotional environment in which we are raised and by repeated experience."

"What's particularly exciting about these findings is that the impact of environment on brain development has been traced down to the level of actual gene expression. This has only, so far, been done in animals, but we have every reason to believe it applies in humans, too. If you are raised in a nurturing environment, there are actually demonstrable, objective changes in gene expression. For example, there are genes for certain molecules that play an important role in regulating our emotions and which respond to nurturing."

"Are you suggesting," the Dalai Lama wanted to know, "that those who are brought up in a nurturing environment have a greater degree of ability to regulate their emotions?"

"Yes, exactly," Richie replied, "and until very recently, neuroscientists believed that we are born with a certain number of neurons, and that's all we have for the rest of our life; over the last two years we have discovered that to be false. It has now been demonstrated in humans that new neurons do grow throughout the entire life span.[13] That is a fantastic new finding."[14]

Returning to his presentation, Richie said,

> I want to spend a little more time talking about the frontal cortex, because it is so important to our ability to regulate emotion, and particularly the destructive emotions. The brain areas that are involved in initially activating an emotion are different from the brain areas that are involved in regulating an emotion.
>
> The amygdala plays a key role on the circuitry that activates emotion, while the prefrontal cortex does much of the regulation.

The Dalai Lama interjected, "One of the unique factors of the human species is the capacity for intelligence; can you identify one or more parts of the brain that specifically correlates to our exceptional human intelligence – that which is distinctively human?"

Richie's response focused on the frontal lobes, "The frontal lobes clearly are important for unique aspects of human intelligence – not just what we think of in the West as cognitive intelligence but also what we think of as emotional intelligence. The frontal lobes are essential for both; moreover evidence suggests regions of the left frontal cortex play an important role in positive emotion, while the right frontal lobe plays that role in certain negative emotions."

The fact that some of the same brain areas involved in positive emotions are also associated with the faculty of reasoning piqued the Dalai Lama's interest. He felt it offered a confirmation from neuroscience of what he had always believed: that the constructive, positive emotions can be both grounded in reason and enhanced by it.

"There are profound differences," Richie continued, "among people in how they respond to the same event. We believe that this is the key to understanding why some people are prone to destructive emotions and why other people may be much less vulnerable. On the basis of brain function we can show that certain people have a very prolonged response and others come back to baseline very quickly. This is what I call the 'recovery function.'[15] When a person is provoked by threatening pictures, people who come back to baseline quickly are those who have less activation in the amygdala and whose activation is shorter in duration. They are people who also show more activation in the left prefrontal cortex – the area important for positive emotion. These are also people who report that their everyday experience is filled with feelings of vigor, optimism, and enthusiasm."

"Moreover, if people who recover very quickly from a negative emotion are asked to voluntarily control their emotion, to suppress their anger or fear, they are better able to do so.[16] The person who is able to recover quickly also has a lower level of cortisol, which plays a key role in stress.[17] We know that when cortisol is

present at high levels over a long period of time, it may kill cells in the hippocampus" – which has been documented in disorders such as posttraumatic stress disorder and severe depression.

"The last point is that the people who recover quickly also have better function in certain measures of immunity. One example is that they have higher levels of natural killer cell activity, a primary defense that the immune system uses to fight off many kinds of foreign antigens from cancerous tumor cells to the common cold."

After a long pause, the Dalai Lama said, "Can you envision a neuroscientific study that would measure if there are any appreciable differences between impulsive emotion such as anger and reasoned emotion such as compassion?"

"Your Holiness," Richie responded, "yesterday, you mentioned that certain types of positive emotions were much more likely to arise from reason, whereas certain negative emotions arise spontaneously. In terms of neuroscience, that's an extremely intriguing observation. This morning I showed some evidence to indicate that certain types of positive emotions are associated with activation on the left frontal lobe, this is also an area where certain types of reasoning occur."

The Dalai Lama was showing a keen interest as Richie continued, "And there is strong evidence that we can use our reasoning skills to increase the activation in this area, which also, in turn, can promote certain positive emotion. The stronger the activation in the left frontal area, in some studies that have already been done, the more there are certain positive emotions, such as vigor, zeal, and persistence.

Further, in certain types of spontaneous negative emotion – for example, when people commit violence or some other antisocial act impulsively, without thinking about it – there is underactivation in the frontal lobes. A paper just came out showing that there is actually atrophy, a smaller frontal lobe, in individuals who have a propensity for this kind of spontaneous antisocial behavior – behavior without thinking before the act."[18]

I took us back to an earlier comment made by the Dalai Lama. "This gets us back to His Holiness's point that we need to have a very sophisticated understanding of the complexities of destructive emotions, particularly when it comes to the question of how to educate people to overcome them."

The Dalai Lama now spoke up, "I would like to present something inspired by the traditional Buddhist concept of the Four Noble Truths,[19] but brought into the secular arena. Let's agree that we all have destructive emotions and then ask ourselves what the nature of these destructive emotions is – really investigate then, analyze them, and look at their effects. What impact do our destructive emotions – hatred, prejudice, and so forth – have on the society as a whole? What role are they playing in the tremendous problems and sufferings that society is experiencing right now?

Can we diminish them? If we were to diminish them, what kind of impact would that have on society as a whole and on the myriad problems that society is experiencing?"

"Once we raise that question, if you come up with a hypothesis that we are not completely hardwired, that our brains and minds are plastic, with a possibility for growth and transformation and for diminishing these destructive emotions, then we can ask how we might go about doing that."

The Dalai Lama noted that people readily agreed on the urgent need to grapple with problems such as poverty and disease. But once society became more prosperous and healthy, another level of problems emerged, one where the pall of destructive emotions was a cause. At that point, the answer lay in helping people with their mental states.

## Schooling for the good heart

As I was writing my 1995 book *Emotional Intelligence*, I searched for ways to make the case that children could benefit greatly from emotional education in schools. Of interest to me then was the PATHS (Promoting Alternative Thinking Strategies) curriculum developed by Mark Greenberg and which had undergone rigorous evaluation to show its actual effectiveness, building a scientific case for expanding education to teach children to be intelligent about emotion. With PATHS, Mark became a pioneer in a new specialty in psychology: the field of primary prevention and hence, he frames his work as more than education – it is also primary prevention, a strategy for lowering the risks young people face in life. The idea behind his work is that if we teach children these things now, we can prevent problems later, particularly the problems that come from afflictive emotions – violence, suicide, drug abuse, and so on; this through teaching them key skills for living. He is also co-director of research for the Collaborative for Academic, Social, and Emotional Learning, based at the University of Illinois at Chicago under the directorship of Roger Weissberg.[20]

Mark began speaking, "It was very interesting yesterday to hear His Holiness say that in a Buddhist text, the model often used for compassion and empathy is the mother–infant relationship; given the essential nature of the parent–infant relationship, I would like to make three points about infancy. First, research indicates that when parents recognize their infants' negative emotions – their anger and sadness – and help them to cope with those emotions, children over time develop better physiological regulation of their emotions and show positive behavior."

"On the other hand, when parents ignore or punish infants for showing these emotions, or get angry at them – I see many parents who get angry at their infants and toddlers for getting angry – over time, children, knowing that certain emotions can't be shared, shut down. This makes a child overstressed, both physiologically and psychologically, because the emotion is still there, and it puts an obstacle in the way of developing a basic trust between the child and adults. Mary Ainsworth's observations of infants and their mothers identified such patterns. By one year of age, some infants will avoid contact with the mother rather than go to her when they are upset and distressed.

The second point is that one of the most important of many factors that place infants at risk is maternal depression. Mothers who have high rates of sad feelings, who are lethargic and depressed, have children who later show higher rates of aggression, anxiety, and depression. Richie Davidson, in previous research, has shown that adults who are depressed have lower activation of the left frontal lobe. The work of Geraldine Dawson indicates this same pattern in mothers who are depressed.[21]

In addition, Dawson has now shown that, by one year of age, infants whose mothers are depressed show the same pattern: less activation of their left frontal lobes. So even in infancy, children who have depressed mothers show less positive emotion and an unusual brain activation pattern. A critical issue here is that relationships in infancy set the course for later social-emotional development. The amount of positive emotions, like joy, in the relationship in infancy is critical to setting the correct brain pathways. We know that each developmental period matters for emotional development, and we must start at the beginning."

In short, making babies happy grows the circuitry that will help them have positive feelings like joy throughout their lives. The Dalai Lama has often mentioned this biological longing for affection as a key point in his own humanitarian view of ethics. His own view was that there is a biological need for such caring, akin to the body's need for food.

"Now I'd like to move to the preschool years," Mark continued. "This is a period in which there is a great deal of learning and the brain is being shaped. There are very important social skills that begin to develop between the ages of three and seven. These skills are very similar to the ones His Holiness has often talked about. They include the ability to have self-control, to stop and calm down when one is upset, and the ability to sustain attention.

In the preschool years there is a dramatic growth in the child's ability to talk about emotions and to recognize emotions. And at last, children can begin to plan and think ahead for the first time. For example, we can ask a four or five-year-old questions about what the child would do when teased by another child. These developmental skills combine information from our emotions and our thinking skills. They are now recognized as processes that all have important correlates in the frontal lobe. For instance, a persistently aggressive style of play in children at the age of five or six is not likely to fade away, at least half of children who show early aggression are going to persist in that aggression through adolescence. As they persist, they will become worse and turn more toward cruelty and violence."[22]

Mark's writings make clear that children who strike out impulsively are displaying a failure to integrate their emotions and their reasoning. Impulsive aggression stems in part from a failure to plan ahead, combined with poor controls on emotional impulse. Both planning and impulse control are functions of the prefrontal lobes. The frontal lobes, as Richie said, have evolved and grown dramatically in humans compared to other primates. However, the prefrontal area itself is quite plastic, shaping its circuitry as the result of the experiences and learning we

undergo, and the prefrontal areas are the last part of the brain to become fully mature, continuing to show anatomical growth into the mid-twenties.

"On the other hand," Mark went on, "children who have good planning skills and are aware of their emotions by the time they are five or six, are at much lower risk for having problems of aggression and anxiety disorders later. Children who are aggressive or who have a chip on their shoulder are very vigilant – they're looking around to see who's going to hurt them next, because they've been hurt before. They're very reactive; they jump quickly. A classic situation in school is lining up, which they have to do many times during the day and so many things happen in the lining-up process.

It's these little, everyday events that are so telling. A child may be bumped in line by another child, and instead of first looking at the situation to see what's happening, an aggressive child will often quickly react with aggression, and then a fight will begin. Children who have had a history of aggression are primed, they're ready to see damage being done to them even when it's not true or when it's accidental.[23]

Consequently, schools may be the only enduring institution that can provide the universal education to build emotional health. I'm very happy to say that we now have scientific evidence that, using the PATHS curriculum two to five times a week, we can be successful in improving children's well-being.[24] When taught with high fidelity, PATHS can build children's social and emotional skills as well as improve some of their thinking skills. We shouldn't think about social and emotional skills separately from these thinking skills: in America, we've often separated these, but we know that there is great interconnection.

We know that effective emotion education curricula have at least five characteristics. First, they focus on helping children calm down, be it for anger, jealousy, or excitement. Second, they increase awareness of emotional states in others. The third characteristic may be more Western: the outward discussion of feelings as a way of solving interpersonal difficulties. Fourth is a very important skill: planning and thinking ahead so that one can avoid difficult situations. And last is considering how our behavior affects others; this is what empathy and interpersonal concern are about.

To illustrate this I'll give you some guidelines, what we think of as ideas to live by, that we teach to the teachers and children; you might call it an ideology about how emotion works. There are four main ideas we want to teach children. The first is that feelings are important signals. They can arise inside our body or they can come from outside, as a signal from someone else and they provide very important information.

We teach children that this information shouldn't be ignored; it should be investigated. Becoming aware of emotions requires understanding how we know what we feel about the situation, how we can put those feelings into words. And how we can recognize those feelings in others.

That is one guideline. That emotions are important signals and we provide the children with tools to practice, in fact many children are afraid of their feelings

and cannot separate their feelings from their behavior. Actually, many adults have a hard time doing this, so it's very important that we help children understand that their feelings are different from their behaviors.

We talk about this in a very simple way. We place signs in the classroom that say, 'All feelings are okay. Behaviors can be okay or not okay.' It's important for children to realize that everyone sometimes feels jealousy, greed, disappointment – the entire spectrum of feelings.

The second guideline is to separate feelings from the behaviors. The question is, what kind of behaviors are okay or not okay? That takes a lot of time for many children to discern. Often when they have certain emotions, let's say anger, and they've been punished for something, they fuse together the emotions they felt and the behavior that they were punished for. They also believe that even feeling certain emotions is already being bad. It's very important to help children see that feelings are just part of us. They arise and we need to look at them. There's nothing wrong with feelings – they are natural.

The third guideline that we tell children is that you can't think until you're calm. This is a sort of a mantra, if you will, in our classrooms. We tell children they must calm down first so that they can see clearly what's happening, and then see what to do about it. The fourth guideline that we use is the golden rule, Mark went on. 'We think this is a very important, age-old piece of wisdom.'" The idea here, of course, is to invoke taking the perspective of others.

Mark illustrated his points by showing a slide of cartoon images of human faces, each standing for a different emotion. "[The]...goal is to teach the children about feelings. Starting developmentally with their simple feelings, over the elementary years we progress to more complex feelings. First of all, we color code them. We talk about yellow feelings, or comfortable feelings. We never discuss them as good or bad; all feelings are okay. Then we talk about blue feelings as feelings that are uncomfortable. We talk about feelings that are comfortable and uncomfortable because of how they make children feel inside. For example, with 'scared' or 'afraid,' we usually teach the opposite at the same time, in this case 'safe'.

Over a number of grades, we teach a variety of feelings, starting with basic ones, like happy, sad, scared, and safe, and then moving to somewhat more complex ones like disappointed or proud; then to even more complex ones like embarrassment and humiliation. By the time the children are eleven years of age, we are discussing quite complex experiences such as feeling rejected and feeling forgiveness.

There is a way in which teaching children about feelings not only helps them to recognize what's going on inside themselves or what's going on inside another person, but also shows them how talking about feelings can actually often solve problems. Let me give you an example with 'malicious.' Teasing is a very difficult problem for children, so when we teach children the word 'malicious,' we teach then that they can say to the person who teases them, 'You're just being malicious'. They are now commenting on the feeling of the other rather than

reacting to the behavior. It's a way of metacontrolling the situation. I was visiting a classroom one day and saw a child being teased by another. The child being teased said to the teaser, 'Are you feeling malicious? Did you have a problem earlier today?' "

Mark added, "We advise the teachers that when the children run in with all of this emotion, the first thing that often happens is that they begin to get emotionally upset themselves. We suggest that teachers might say, 'You're looking very upset, and now I'm starting to feel it too. We all need to calm down.' One way of doing this is for the children to go find their feeling faces and find out what emotion they're feeling.[25]

This is the idea, theoretically, of activating the left frontal lobe. It's using the language center in the reasoning part of the brain to now begin to understand and, in that way, manage the emotion. Sometimes it works and sometimes it doesn't, of course."

"This is very true," the Dalai Lama agreed. "From the Buddhist perspective, what is being done here is to skillfully divert the focus away from the strong emotion so that the mind can first be brought to a neutral state."

Nodding, Mark added, "And we believe that developmentally, at this period from three to eight or nine, when children are learning to label emotions, we can lay down these pathways in the brain. We think that laying these abilities down as habits at this critical age in life is very important."

Mark then emphasized the power for children of seeing adults demonstrate these emotional skills. "In the school, it is critically important that teachers learn to model these skills and make them their own. For many teachers this is very difficult to do.[26] As for the mothers and fathers, there is good evidence that many parents also do what we call emotional coaching.[27] When a child is angry or sad, they don't turn away from the child. They don't punish the child. They help the child to understand that their feeling will not overwhelm them, that it's okay and can be worked with, that it's a natural phenomenon. And those children show the same positive capabilities: better behavior and a better ability to manage their physiological arousal.

Although adults are important in children's lives, the heat of the moment is almost always in peer relationships. Really a parent can't do this all alone, either. We have to create contexts in schools in which they see these skills as valued in their peer relationships, not just by adults but by other children. And children need to realize from an early age that this is really what growing up is all about. In America this is quite a problem given the radical changes in the last twenty years in the amount of time adults spend with children."

The Dalai Lama turned to Jinpa and quietly told him how happy he was to hear Mark's report. All along he had been saying there was a real need to bring something like this into education, and now something concrete and practical was being done.

Mark went on, "Over the last seven or eight years we've begun to work on telling children true stories about important people in the world. Some are

children just like themselves who have done important things to help the world, and some are adults, like His Holiness.

This is an example of how we can use a story to weave PATHS into language arts and the reading curriculum, so we integrate these lessons across the school day. There's a story about a famous baseball player in America, Jim Abbott, who only has one arm. We're interested in teaching the idea of persisting through obstacles, and of course he had an enormous obstacle. He tells the story that when he was a child, everyone said he could never be a baseball player because of his one arm. We then ask the children about a goal they think they can't reach. We have them write it down and think of steps to reach that goal.

Another example is Aung San Suu Kyi from Burma. We use her life as an example of social responsibility, that sometimes you must give your life for something that is important. We tell the story of her being under house arrest for many years, and what the democracy movement is in Burma.

After discussing her biography, we have the children do a short project to improve their school or their neighborhood. The idea is to transfer the understanding of certain emotions and goals that Aung San Suu Kyi had. Then they can see those same goals in themselves.

I speak humbly about these examples, because we are just beginning to learn how to work with positive emotions. We've been much more focused on managing destructive emotions. I know that there is an ancient history in Buddhism of developing compassion in young monks; maybe I should pose this as a question to His Holiness. Do any ideas come to mind for ways we can help develop compassion in young adolescents' minds?"

At that, the Dalai Lama asked in Tibetan what others present thought, at which point Matthieu commented, "There is a very small thing which I notice in some Tibetan families that I thought was wonderful. A child will make presents for everybody else on his own birthday and is happy to do so. These small things are not big principals, but they say something."

Mark agreed. "We know that for children, it's not the big ideas but the small things that happen every day that are so important. Considering this, please allow me to close with one further story that we use with third-graders.

There is a thirteen-year-old boy named Trevor Ferrell. One night he was watching the news on television and he saw homeless people on the streets in the downtown area of Philadelphia. He went to his father and said, 'We have some blankets in the garage. I want to take those blankets downtown and give them to people. They're sleeping in the grates where the steam comes out.'

His father thought it was a strange idea, but he took him down there, and it was very rewarding to Trevor and his father. The next day Trevor started putting signs up in the grocery store and other places: 'Does anybody have blankets they don't use? Is there any food people don't need?' Within a week he had a garage full of food, and now in Philadelphia there are a number of warehouses that are called Trevor's Place that feed the homeless."

The Dalai Lama had been smiling and nodding rapidly in approval throughout Mark's tale.

"We tell this story and . . . talk about how, when Trevor felt that there was something really wrong, he needed to calm down and think, 'What can I do.' The idea is that it's not just adults like His Holiness who can be models, but there's something that children themselves can do. That's how we try to communicate, through story, but we're looking for new ideas."

## Encouraging compassion

Now the Dalai Lama had much to say. "A classic procedure in Buddhism for cultivating compassion is to develop a way of viewing others as if each sentient being is your own mother. Why do it? Because viewing an individual as your mother brings forth a sense of fondness, cherishing, gentleness, affection, and gratitude. Now, you can often get the impression that the cultivation of compassion and lovingkindness is something that we do for others, an offering we make to the world. But that's really a very superficial way to see it. I feel from my own experience that when I practice compassion there is an immediate direct benefit to myself, not for others. By practicing compassion, I get one hundred percent benefit, while the benefit to others may be fifty percent. So the main motivation for the practice of compassion is self-interest."

Francisco Varela then offered that "I've found a very interesting connection with the practice of cultivating compassion, where at the beginning we use our imagination to generate an emotion that is slightly contrived, but then we get used to it and we carry it through. There is more and more evidence that perception and imagination are very closely linked mental functions."

"Therefore, you can learn and modify with the imagination in a physiological sense. This is the idea of neuroplasticity."

I highlighted the implication; "If these practices are actually effective, wouldn't it suggest that there must be underlying neural change?" "Yes," Richie said, "when it's practiced more consistently, it becomes more of a mood or a temperament. As a temperament, there is some evidence to indicate that part of our brain has changed in a relatively permanent way."

After this exchange, Paul Ekman shifted our focus to how the brain learns negative behavior. "The first time one acts in a seriously cruel fashion may be the most difficult. But if you continue to act in a cruel fashion, you are in all likelihood changing your brain in such a way that cruelty now becomes your temperament, we see a lot of that. When faced with someone who has already established cruelty as their way rather than compassion, what can we do?"

Matthieu observed, "You need two hands to clap. If someone is not at all in the mood for conflict, it is more difficult to get in a fight with that person. We find many stories of meditators and hermits in Tibet who encountered bandits and even sometimes wild animals. When the bandits suddenly come into the presence

of someone who is very serene, with loving composure, their attitude and initial intention completely subside."

Following Matthieu's lead, Paul commented, "It appears that people who act cruelly aren't moved by signs of suffering or fear – they depersonalize. People whose job is to be cruel report that they don't respond to the other person's pain, so there is a negative side to the plasticity of brain: One can learn to no longer regard people as people."

In support of this, I then mentioned that, "A man in California is now in prison for killing his grandparents, his own mother, and five female students at the University of California. When asked 'How could you do it? Didn't you feel any pity for your victims?' he replied very matter-of-factly, 'Oh, no, if I had felt any of their suffering I couldn't have done it.'"

"He didn't feel a thing for them and that was the key to his cruelty."

## Discussion

While modern science has focused on formulating ingenious chemical compounds to help us overcome toxic emotions, Buddhism offers a different, albeit far more labor-intensive, route: methods for training the mind, largely through meditation practice. Indeed, Buddhism explicitly explains these trainings as an antidote to the mind's vulnerability to toxic emotions.

Medicines are the leading modality in the West for addressing disturbing emotions, and for better or worse, there is no doubt that mood-altering pills have brought solace to millions. But there is one compelling question: can a person through his or her own efforts, bring about lasting positive changes in brain function that are even more far-reaching that medication in their impact on emotions. And this question, in turn, raises others: For instance, if in fact people can train their minds to overcome destructive emotions, could practical, non-religious aspects of such training be part of every child's education? Or could such training in emotional self-management be offered to adults, whether or not they were spiritual seekers?

A year after our five-day dialogue with the Dalai Lama, Lama Öser,[28] a European-born Tibetan monk, came to the E. M. Keck Laboratory for Functional Brain Imaging and Behavior, on the Madison campus of the University of Wisconsin, at the invitation of Richard Davidson who had wanted Öser to be studied intensively with state-of-the-art brain measures in order to bring some light to the issues that I have just brought up.

Öser has spent several months at a stretch in intensive, solitary retreat. All told, those retreats add up to about two and a half years. But beyond that, during several years as the personal attendant to a Tibetan master, the reminders to practice even in the midst of his busy daily activities were almost constant. Once in the laboratory, the question was what difference any of that training had made.

With Öser's consultation, the eight-person research team agreed on a protocol where he would rotate from a resting, everyday state of mind through a sequence

of several specific meditative states . . . Indeed, there are dozens of distinct, highly detailed varieties of mental training – too loosely lumped together in English under the term "meditation" – each with its own instructions and specific effects on experience and, the research team hoped to show, on brain activity.

Tibetan Buddhism may well offer the widest menu of meditation methods, and it was from this rich offering that the team in Madison began to choose what to study. The initial suggestions from the research team were for three meditative states: a visualization, one-pointed concentration, and generating compassion. The three methods involved distinct enough mental strategies that the team was fairly sure they would reveal different underlying configurations of brain activity.

One of the methods chosen, one-pointedness – a fully focused concentration on a single object of attention – may be the most basic and universal of all practices, found in one form or another in every spiritual tradition that employs meditation.[29] Focusing on one point requires letting go of the ten thousand other thoughts and desires that flit through the mind as distractions; as the Danish philosopher Kierkegaard put it, "Purity of heart is to want one thing only."

Öser proposed three more approaches that he thought would usefully expand the data yield: meditations on devotion and on fearlessness, and what he called the "open state."[30] The last refers to a thought-free wakefulness where the mind, as Öser described it, "is open, vast, and aware, with no intentional mental activity. The mind is not focused on anything, yet present, very open and undistracted. Thoughts may start to arise weakly, but they don't chain into longer thoughts – they just fade away."

Perhaps as intriguing was Öser's explanation of the meditation on fearlessness, which involves "bringing to mind a fearless certainty, a deep confidence that nothing can unsettle – decisive and firm, without hesitating, where you're not averse to anything. You enter into a state where you feel, no mater what happens, 'I have nothing to gain, nothing to lose.' " One aid to this meditation, he added, is bringing to mind these same qualities in his teachers. A similar focus on his teachers plays a key role in the meditation on devotion, he said, in which he holds in mind a deep appreciation of and gratitude toward his teachers and, most especially, the spiritual qualities they embody.

That strategy also operates in the meditation on compassion, with his teachers' kindness offering a model. Öser explained that generating love and compassion, bringing to mind the suffering of living beings and the fact that they all aspire to achieve happiness and be free from suffering, is a vital part of the training. So also is the idea, "let there be only compassion and love in the mind for all sentient beings – friends and loved ones, strangers and enemies alike. It's compassion with no agenda, which excludes no one. You generate this quality of loving, and let it soak into the mind."

Finally, the visualization entailed constructing in the mind's eye a fully detailed image of the elaborately intricate details of a Tibetan Buddhist deity. As Öser described the process, "You start with the details and build the whole picture from top to bottom. Ideally, you should be able to keep in mind a clear and complete picture."

Öser confidently assumed that each of these six meditation practices should show distinct brain configurations. For the scientists, there are clear distinctions in cognitive activity between, say, visualization and one-pointedness. But the meditations on compassion, devotions, and fearlessness do not seem that different in the mental processes involved, though they differ clearly in content. From a scientific point of view, if Öser could demonstrate sharp, consistent brain signatures for any of these meditative states, it would be a first.

As Öser entered the rooms where the functional MRI (fMRI) studies[31] would be conducted, the scene resembled a mission control room for inner space. While some research subjects are a bit reluctant to submit to their hour or so in the MRI, Öser's eagerness was clear; he wanted to go right in. Now lying peacefully on a hospital gurney, Öser sounded unperturbed as the technicians led him through the checks to ensure the MRI images were tracking. "Öser, your brain looks beautiful," Davidson said. "Let's start with five repetitions of the open state."

A computerized voice then took over, to ensure precise timing for the protocol. The prompt "on" was the signal for Öser to meditate, followed by silence for sixty seconds while Öser complied. Then "neutral," another sixty seconds of silence, and the cycle started once again with "on;" the same routine guided Öser through the other five meditative states and then he came out of the MRI beaming broadly while proclaiming, "It's like a mini-retreat!"[32]

Without taking more than a brief break, Öser then began the electroencephalogram (EEG) study of his brain waves. Most EEG studies use only thirty-two sensors on the scalp to pick up electrical activity in the brain, but Öser's brain would be monitored twice, using two different EEG caps, the first one with 128 sensors, next with a staggering 256.The first cap would capture valuable data while he again went through the same paces on the meditative states. The second, with 256 sensors, would be used synergistically with the earlier MRI data.[33]

The next day the Dalai Lama arrived and was greeted by Davidson and given a tour of the laboratory. Davidson proceeded to explain the EEG and fMRI technology. That prompted the Dalai Lama to ask, "Can you show a thought preceding the action? Can you tell if a thought comes first, before changes occur in the brain?"

In the ensuing discussion, Davidson was struck that the Dalai Lama had what seems an almost preternatural feel for the data and the methods of science, a talent repeatedly exhibited over and over in his conversations with scientists. As Davidson put it, "I've seen His Holiness penetrate into data when every one else but the specialists are left behind."

The Madison meeting had been arranged as a scientific briefing for the Dalai Lama on several lines of related research on Lama Öser, all emanating from the previous dialogue on destructive emotions and their antidotes of which this chapter is a report. The following are the findings of the research:

- The first look at the vast amount of fMRI data offered strong signs that Öser had been able to voluntarily regulate his brain activity through purely mental processes.[34]

- From the preliminary analysis of Öser's data, it seems that his mental strategies were accompanied by strong, demonstrable shifts in the MRI signals. These signals suggest that large networks in the brain changed with each distinct mental state he generated. Ordinarily, such a clear shift in brain activity between states of mind is the exception, except for the grossest shifts in consciousness – from waking to sleep, for instance. But Öser's brain showed clear distinctions among each of the six meditations.
- The EEG analysis showed a dramatic increase in key electrical activity known as gamma in the left middle frontal gyrus, a zone of the brain Davidson's previous research had pinpointed as a locus for positive emotions. In research with close to two hundred people, Davidson's laboratory had found that when people have high levels of such brain activity in that specific site of the left prefrontal cortex, they simultaneously report feelings of happiness, enthusiasm, joy, high energy, and alertness.
- While Öser was generating a state of compassion during meditation, he showed a remarkable leftward shift in this parameter of prefrontal function, one that was extraordinarily unlikely to occur by chance alone.
- Öser's brain shift during compassion seemed to reflect an extremely pleasant mood. This finding lends scientific support to (the) observation often made by the Dalai Lama that the person doing the meditation on compassion for all beings is the immediate beneficiary.[35]

Paul Ekman also performed four experiments on Öser some several months prior to those at Madison.[36] Ekman stated that in these four studies "we found things we've never found before."

- In the first test, one of "accurate empathy," "both Öser and another advanced Western meditator" tested "above the norm in recognizing . . . superquick facial signals of emotions . . . They both scored far higher than any of the five thousand other people tested."[37]
- They did better than policemen, lawyers, psychiatrists, customs officials, judges – even Secret Service agents.

The second test that Öser submitted to was the "startle reflex" test, [a test whose] intensity predicts the magnitude of negative emotions a person feels – particularly fear, anger, sadness, and disgust.[38] The experiment was conducted at the psychophysiological laboratory of Ekman's colleague, Robert Levenson at the University of California at Berekely. He was wired, in order to capture his heart rate and sweat response, the physiological reactions to a startling sound. [He was also videotaped for his facial expressions] . . . they [then] chose a sound at the top of the threshold for human tolerance – like a pistol being fired . . . near one's ear.

They gave Öser the standard instruction, telling him that they would count down from ten to one, at which point he would hear a loud noise. They asked that he try to suppress the inevitable flinch, so that someone looking at his would not

know he felt it. Some people can do better than others, but no one can come remotely close to completely suppressing it. A classic study in 1942 showed that it's impossible to prevent the startle reflex, despite the most intense, purposeful efforts to suppress the muscle spasms. No one Ekman and Levenson had ever tested could do it... Researchers also found that even police marksmen, who fire guns routinely are unable to keep themselves from startling.

- Öser, however, was able to do so.
- Öser practiced two types of meditation while having the startle tested: one-pointed concentration and the open state.
- As Öser experienced it, the biggest effect was from the open state: "When I went into the open state, the explosive sound seemed to me softer, as if I was distanced from the sensations, hearing the sound from afar."... Öser later elaborated, "If you can remain properly in this state, the bang seems neutral, like a bird crossing he sky."
- Öser did not show a ripple of movement in any facial muscles while in the open state, but his physiological measures (including heart rate, sweating, and blood pressure) showed the increase typical of the startle reflex.
- However, during the one-pointedness meditation, instead of the inevitable jump, there was a *decrease* in Öser's heart rate, sweating, and blood pressure, and so on.

The next assessment was to test social relations in which Öser would have two discussions, confrontations about issues where he and the person he talked with disagreed. As they talked, their physiology would be measured to assess the impact of their disagreement.

His partners would both be scientists dedicated to a rationalist view, and the topics were chosen to ensure a disagreement, the first being whether one should abandon science and become a monk and the second being about reincarnation. Comparatively, the first conversational partner was quite gentle though his views on the topics were opposite Öser's, while the second maintained an aggressive and rather confrontational style of disputation. During the conversations Öser and his partner had their physiology monitored and their faces videotaped.

- Öser's physiology was virtually the same no matter whom he was talking to.
- The difficult professor showed high emotional arousal from the start. Yet over the course of the fifteen-minute dispute, his arousal decreased, as talking with Öser quieted him. At the end of their talk, the typically disputatious sparring partner spontaneously volunteered, "I couldn't be confrontational. I was always met with reason and smiles; it's overwhelming. I felt something – like a shadow or an aura – and I couldn't be aggressive."

In the final experiment, Öser watched two medical training films used in emotion research because they are so upsetting. In the first, a surgeon seems to amputate

a limb with a scalpel and saw – actually he is preparing an arm stump to be fitted with a prosthesis. In the second you see the pain of a severely burned patient, who stands as doctors strip skin off his body. The main emotion evoked in scores of research subjects who have viewed both of these films during experiments is highly reliable: disgust.

- Öser's disgust reaction was standard for the amputation film; there was nothing remarkable about it.
- However during the burn film, Öser spontaneously felt compassion and his physiological signs reflected relaxation even more strongly than when they had been measured during the resting state.
- Ekman ended his report by noting that each of the studies with Öser had "produced findings that in thirty-five years of research I have never seen before."

From the scientific perspective, what does any of this matter? Davidson summed it up by referring to a book the Dalai Lama wrote with psychiatrist Howard Cutler, The Art of Happiness, in which the Dalai Lama said that happiness is not a fixed characteristic, a biological set point that will never change. Instead, the brain is plastic, and our quota of happiness can be enhanced through mental training.

The implications for research on meditation (are worthy of note). Some studies, for instance, have used relative beginners and had them meditate for long periods, during which their brain states were likely to have meandered through a range of experiences.[39] Such imprecision makes brain imaging data difficult to interpret with certainty. What is more some of these researchers have made questionable speculations, going way beyond what the data actually support – for instance, expounding on the metaphysical implications of their findings.

Davidson's aims in studying meditation are more modest, and grounded in well-accepted scientific paradigms. Rather than trying to speculate about the theological implications of his findings, he seeks to use skilled meditators to better understand what he calls "altered traits" of consciousness – transformations of the brain and personality that endure, and which foster well-being.[40]

Öser, reflecting on the data reported at the Madison meeting, put it this way: "Such results of training point to the possibility that one could continue much further in such a transformation process, and, as some great contemplatives have repeatedly claimed, eventually free one's mind from afflictive emotions. The very notion of enlightenment begins to make sense." When I asked the Dalai Lama what he made of the data on Öser – such as being able to mute the startle reflex – he replied, "It's very good he managed to show some signs of yogic ability,[41] but there is a saying, 'The true mark of being learned is humility and mental discipline; the true mark of a meditator is that he has disciplined his mind by freeing it from negative emotions.' We think along those lines – not in terms of performing some feats or miracles."

One pay off for this scientific agenda would be in inspiring people to better handle their destructive emotions through trying some of the same methods for training the mind. When I asked the Dalai Lama what greater benefit he hoped for from this line of research, he replied: "Through training the mind people become more calm – especially those who suffer from too many ups and downs. That's the conclusion from these studies of Buddhist mind training. And that's my main end: I'm not thinking how to further Buddhism, but how the Buddhist tradition can make some contribution to the benefit of society. Of course, as Buddhists, we always pray for all sentient beings. But we're only human beings; the main thing you can do is train your own mind."

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## Acknowledgments

Due to the focused nature of this article, it was not possible to discuss all of the participants' presentations; however, we are grateful for their contribution. The participants included, in alphabetical order: Richard Davidson, PhD, William James Professor and Vilas Professor of Psychology and Psychiatry; director, Laboratory for Affective Neuroscience at the University of Wisconsin-Madison. Davidson is a pioneer in the search for the neurological substrates of emotion. Paul Ekman, PhD, professor of psychology and director of the Human Interaction Laboratory at the University of California Medical School in San Francisco. Further, Paul is a master of the face and reading emotions and has done more than thirty years of world-class research. He is the world's most eminent expert on the way the face expresses emotions. Owen Flanagan, PhD, James B. Duke Professor and Chair of Philosophy, fellow in cognitive neuroscience, and Allied Professor of Experimental Psychology, Duke University, USA. Daniel Goleman, PhD, co-chair of the Consortium for Research on Emotional Intelligence in the Graduate School of Applied and Professional Psychology at Rutgers University. Mark Greenberg, PhD, Bennet Chair in Prevention Research; professor of human development and family studies; director, Prevention Research Center for the Promotion of Human Development, Pennsylvania State University. Geshe Thupten Jinpa, PhD, president and chief editor for the Classics of Tibet Series produced by the Institute of Tibetan Classics in Montreal, Canada. Jinpa is the Dalai Lama's main English-language interpreter on his worldwide trips and holds *Geshe* Degree, the Tibetan equivalent of a doctorate in Divinity and also a PhD in Religions Studies from Cambridge. Mathieu Ricard, PhD, author; Buddhist monk

at Shechen Monastery in Kathmandu and French interpreter for His Holiness the Dalai Lama. In this meeting he presented the Buddhist perspective on destructive emotions. Jeanne L. Tsai, PhD, assistant professor of psychology, University of Minnesota, Minneapolis and St. Paul, USA. Francisco J. Varela, PhD, Fondation de France Professor of Cognitive Science and Epistemology at Ecole Polytechnique; director of research, CNRS, Paris; head of the Neurodynamics Unit at the Salpetrière Hospital, Paris, France. B. Alan Wallace, PhD, visiting lecturer, Department of Religious Studies, University of California, Santa Barbara. Alan, a former Tibetan monk and fluent in Tibetan, was one of two translators for the Dalai Lama over the course of this five-day meeting. He is also a scholar of Buddhism and throughout the meeting, was my co-chair for philosophy.

## Notes

1 Distinguished from those feelings that are purely sensory, such as a cut finger or exhaustion.

2 This definition had been arrived at by our group as a whole during two days of heated discussion at our preliminary meeting at Harvard several months before. Furthermore, as the Dalai Lama said, he was attending the meeting for the sake of "making a contribution to society – not how to aim for Nirvāṇa." In other words, the Buddhist view that destructive emotion is that which obstructs clarity and emotional equilibrium and interferes with spiritual progress, was not adopted as it is too narrow in the framework of modern society.

3 The most generic Tibetan terms for thought also embrace emotions: *tokpa* and *namtok*.

4 Here Paul observed that "sometimes it precedes, sometimes it is simultaneously and sometimes it comes after."

5 See, for example, Daniel Goleman (1978) "Buddhist Psychology," in Hall, G. and Lindzey, G. (eds) *Theories of Personality*, New York: Wiley.

6 Love is one of the fifteen or so emotional cousins in the enjoyment family.

7 For a discussion of the significance of the mother–child relationship, especially pertaining to the meditative cultivation of compassion in Buddhism, see Tsongkhppa, *The Principal Teachings of Buddhism* (trans.) Geshe Lobsang Tharchin (1988) Howell, NJ: Classics of Middle Asia, pp. 95–107.

8 The Dalai Lama here specified that in the contemplation of another's suffering, although the mind might be somewhat disturbed, that would be more on the surface, while deep down there would be a sense of confidence. This would then indicate that on a deeper level there would be no disturbance.

9 See for example, Davidson, R. J. and Irwin, W. (1999) "The Functional Neuroanatomy of Emotion and Affective Style," *Trends in Cognitive Science* 3, 11–21.

10 The Pāli term "*Bhante*" is a polite address to a Theravāda monk and can best be translated as "Sir."

11 Alan explained what was meant here by reification: "If you simply apprehended a flower, then you simply know there's a flower. The reification is grasping on to the flower as something existing exactly in accordance to the manner in which it appears. The flower appears as if it exists from its own side, by its own nature, objectively, independently – that's how it appears. In the first instant there is simply a valid apprehension of the flower. But the grasping onto the flower as if it exists just as it happens – that is a false cognition, a misapprehension."

12 Czeh, B., Michaekis, T., Watanabe, T., Frahm, J., de Biurrun, G., van Kampen, M., Bartolomucci, A., and Fuchs, E. (2001) "Stress-Induced Changes in Cerebral Metabolites, Hippocampal Volume, and Cell Proliferation Are Prevented by Antidepressant Treatment with Tianeptine," *Proceedings of the National Academy of Sciences of the United States of America* 98, 22, 12796–12801.

13 Erikson, P. S., Perfilieva, E., Bjork-Eriksson, T., Alborn, A. M., Nordborg, C., Peterson, D. A., and Gage, F. H. (1998) "Neurogenesis in the Adult Human Hippocampus," *Nature Medicine* 4, 11, 1313–1317.

14 The new neurons that emerge have been thought to be associated with new learning and memory.

15 This refers to how long it takes for a person to come back to a quiet baseline condition of calm after being provoked by an emotion. This is another way of talking about what Paul Ekman has termed above, the "refractory period."

16 This can be demonstrated very rigorously in experiments.

17 Cortisol is a hormone released by the adrenal glands, which sit over the kidneys but are controlled by the brain. When a stressful event occurs in the environment, most people will release cortisol, but the people who recover quickly have lower levels of cortisol in general, at baseline.

18 Raine, A., Lencz, T., Bihrle, S., LaCasse, L., and Colletti, P. (2000) "Reduced Prefrontal Gray Matter Volume and Reduced Autonomic Activity in Antisocial Personality Disorder," *Archives of General Psychiatry* 57, 2, 167–202.

19 Some explanation of the Four Noble Truths and their relation to the Dalai Lama's discussion seems to be called for here. As Rupert Gethin has pointed out (Gethin 1986) "The Five Khandhas: Their Early Treatment in the Nikāyas and Early Abhidhamma," *Journal of Indian Philosophy* 41–42, the Pāli Suttas use the formula of the Four Noble Truths to explain other doctrines, such as the Five Aggregates, which in Buddhist psychology are the five components that make up a human being, the first being the body and the next four, the elements of the mind.

As for the Four Noble Truths, the Middle Length Discourse of the Buddha (Ñāṇamoli Bhikkhu (trans.), Bhikkhu Bodhi (revised edition) (1995), *The Middle Length Discourse of the Buddha*, Kandy: Buddhist Publication Society, p. 278) explains there are Four Noble Truths: "The noble truth of suffering, the noble truth of the origin of suffering, the noble truth of the cessation of suffering, the noble truth of the way leading to the cessation of suffering." Likewise, Gethin quotes the Saṃyutta Nikāya as discussing the Five Aggregates in the Four Noble Truth formula as follows: "Monks, I will teach you [personal] identity, the origin of identity, the cessation of identity, and the way leading to the cessation of identity." See the *Connected Discourses of the Buddha* (Bodhi Bhikkhu, (2000) (trans.), *The Connected Discourses of the Buddha*, Summerville, MA: Wisdom), p. 964.

This then brings us back to the Dalai Lama using the Four Noble Truths formula to explain the issues surrounding destructive emotions: first there is the truth of destructive emotions ("Let's agree that we all have destructive emotions"), then there is the truth of the arising of emotions ("what is the nature of these destructive emotions?"), next is the truth of the cessation of destructive emotions ("If we were to diminish them, what kind of impact would that have on society as a whole and on the myriad problems that society is experiencing?"), and finally is the truth of the way leading to the cessation of destructive emotions ("if you come up with a hypothesis that we are not completely hardwired, that our brains and minds are plastic, with a possibility for growth and transformation and for diminishing these destructive emotions, then we can ask how we might go about doing that").

20 The Collaborative for Academic, Social, and Emotional Learning includes those doing basic research in the emotions and child development, teacher training, and preventative

interventions; it also includes policy makers. Their unifying focus is providing scientific information on social and emotional learning to schools and the public, and promoting the use of effective science-based curricula. One of the services offered is a website, www.casel.org, which lists over two hundred school programs that follow the principles that work best – not only helping children master the essential emotional and social skills they need, but also boosting academic performance.

21 Dawson, G., Frey, K., Panagiotides, H., Yamada, E., Hessl, D., and Osterling, J. (1999) "Infants of Depressed Mothers Exhibit Atypical Frontal Electrical Brain Activity During Interactions with Mother and with a Familiar, Nondepressed Adult," *Child Development* 70, 1058–1066.

22 Conduct Problems Prevention Research Group (1992) "A Developmental and Clinical Model for the Prevention of Conduct Disorders: The FAST Track Program," *Development and Psychopathology* 4, 509–527.

23 Dodge, K. A. (1986) "A Social Information Processing Model of Social Competence in Children," in M. Perlmutter (ed.) *Cognitive Perspectives on Children's Social and Behavioral Development*, The Minnesota Symposium on Child Psychology, vol. 18, Hillsdale, NJ: Lawrence Erlbaum.

24 Greenberg, M. T. and Kusché, C. A. (1998) *Promoting Alternative Thinking Strategies: PATHS*, Blueprint for Violence Prevention, Book 10, Boulder, CO: Institute of Behavioral Sciences, University of Colorado.

25 It is at this time that the teacher will ask the children to take out their "feeling faces." This is an emotional education activity based on the teacher regularly handing out an emotionally descriptive "feeling face" on a small card and each child puts it on a ring and keeps these faces on his or her desk. The child begins with a few "feeling face" cards and slowly the ring becomes full of more and more faces. These cards are then used throughout the day to express and develop awareness of their inner states of being.

26 "In fact, it is quite demanding, and there are individual differences in how good teachers are at this. But if we give them regular weekly support by having one of our staff work with them, their modeling can have a profound influence on how the children use emotional abilities. Even when I'm doubtful that I can get teachers to model calming down, talking to themselves, and modeling for children how to use their intelligence, many times it turns out they *can* do it. This fits with Aristotle's notion that virtues are harmonized by exposure to wise elders. This modeling by adults is critical. We find that when teachers don't model what they teach, the children don't use it."

27 Gottman, J. M., Katz, L. F., and Hooven, C. (1997) *Meta-Emotion: How Families Communicate Emotionally*, Hillsdale, NJ: Lawrence Erlbaum.

28 Lama Öser has trained for more that three decades, including many years at the side of one of Tibet's greatest spiritual masters. Lama Öser's name has been changed here to protect his privacy.

29 In this case, Öser simply picked a small bolt to focus his gaze on and held it there, bringing his focus back whenever his mind wandered off.

30 The six states studied, in translation from the Tibetan, are: visualization, *kyerim yidam lha yi mig pa*; one-pointed concentration, *tse chik ting ngey dzin*; vast compassion, *migmey nyingje*; devotion, *lama la mögu*, fearlessness, *gang la yang jig pa med pey mig pa*; open state, *rigpa'i chok shag*.

31 Öser's testing started with the fMRI, the current gold standard of research on the brain's role in behavior . . . the standard MRI, in wide use on hospitals, offers a graphically detailed snapshot of the structure of the brain. But the fMRI offers all that in video – an ongoing record of how zones of the brain dynamically change their level of activity from moment to moment. The conventional MRI lays bare the brain's structures, while the fMRI reveals how those structures interact as they function.

The fMRI could give Davidson a crystal-clear set of images of Öser's brain, cross-cutting slices at one millimeter – slimmer that a fingernail. These images could then be analyzed in any dimension to track precisely what happens during a mental act, tracing paths of activity through the brain.

32 Öser then said that he wanted to repeat the open state, compassion, devotion and one-pointedness techniques again but this time he wanted to remain in each state longer. This all took more than three hours due to reprogramming and ironing out technical hitches.

33 There are only three or four other neuroscience laboratories anywhere that use 256 EEG sensors. That many readings from the brain, when analyzed by a state-of-the-art piece of analytic software called source localization, allow a triangulation that pinpoints the neural location a signal is coming from. Source localization can penetrate to sites deep inside the brain – something ordinary EEG measures, which monitor only the topmost layer of the brain, simply cannot offer.

34 By contrast, most untrained subjects given a mental task are unable to focus exclusively on the task – and consequently have considerable noise added to the signals that reflect their voluntary mental strategies.

35 Among other benefits of cultivating compassion, as described in classic Buddhist texts, are being loved by people and animals, having a serene mind, and sleeping and waking peacefully, and having pleasant dreams (Sharon Salzberg (1995) *Lovingkindness*, Boston: Shambala).

36 In Ekman's laboratory.

37 The test consists of a videotape in which a series of faces show a variety of expressions very briefly. The challenge is to identify whether you have just seen the facial signs, for instance, of contempt, or anger, or fear. Each expression stays on the screen for just one-fifth of a second in one version, and for one-thirtieth of a second in another – so fast that you would miss it if you blinked. Each time the person must select which of the six emotions he or she has just seen. The ability to recognize fleeting expressions signals an unusual capacity for accurate empathy. Such expressions of emotion – called microexpressions – happen outside the awareness of both the person who displays them and the person observing. Because they occur unwittingly, these ultrarapid displays of emotion are completely unsensored, and so reveal – if only for a short moment – how the person truly feels.

38 The bigger the person's startle, the more strongly that individual tends to experience negative emotions – though there is no relationship between the startle and the positive feeling such as joy. For an interesting cross-cultural study of the startle reflex, see Simons, R.C. (1996) *Boo! Culture, Experience and the Startle Reflex*, New York: Oxford University Press.

39 For instance, a much-touted study of meditation used SPECT, which makes an image of the rate at which areas of the brain take up a given type of molecule, in this case one that labels blood flow. A single period of meditation was compared with a resting period among subjects who varied considerably in their meditation experience. The data (was) valuable in highlighting general areas of the brain activated during meditation, such as regions of the prefrontal cortex. But the methods for analyzing the imaging data were relatively crude, and the study's usefulness was further limited by the fact that only a single meditation period was compared with a single resting period, making it impossible to tell if the patterns found were repeatable, reliable correlates of meditation. Beyond these problems, the researchers went far beyond their data, making dubious claims about the role of the patterns of brain activity they observed in producing an "altered sense of space" in meditation that might produce a feeling of transcendence of one's ordinary boundaries. Newberg, A., Alavi, A., Baime, M., Pourdehnad, M., Santanna, J., and d'Aquili, E. (2001) "The Measurement of Cerebral

Blood Flow During the Complex Cognitive Task of Meditation: A Preliminary SPECT Study," *Psychiatry Research* 106, 2, 113–122.

40 The notion of altered traits of consciousness was proposed in an article Davidson and I coauthored while we were at Harvard together in the early 1970s – he was still a graduate student and I, at the time, a visiting faculty member there. See Davidson, R. C. and Goleman, D. J. (1977) "The Role of Attention in Meditation and Hypnosis: A Psychobiological Perspective on Transformation of Consciousness," *The International Journal of Clinical and Experimental Hypnosis* 25, 4, 291–308.

41 Here he used the term "yogic" not in the garden-variety sense of a few hours a week practicing postures on a yoga studio but in the classic sense – referring to one who dedicates his or her life to the cultivation of spiritual qualities.

# 18

# FINDING THE MIDDLE WAY

## A multi-domain model of meditation in the treatment of compulsive eating

*Jean Kristeller and James W. Jones*

In the Noble Eight-fold Path the Buddha provided direction on how to live one's life without constantly being caught in conditioned desires and cravings of life, in order to find release from *dukkha*, or suffering. The Buddha assuredly meant for his teachings to be taken into the day-to-day activities of one's life. The Noble Eight-fold Path (*ariya aṭṭhaṅgika magga*) is a way to the cessation of suffering by "rightly" engaging in ordinary human activities such as speech, action, and livelihood. In addition to these ordinary activities of daily life, the Buddha also spoke to engaging the appropriate attitude, "right view or understanding (*sammā diṭṭhi*),"motivation or "right intention or thought (*sammā saṅkappa*)," and means or meditation practice (*vipassananā bhāvanā*) and mindful awareness (*sati sampajañña*) to achieve this disengagement from conditioned desires and patterns. Furthermore, right view and right intention were then recognized to form together the essence of "wisdom" (*pañña*) (Williams 1989; Lopez 1995).

### Unwise eating

One of the most fundamental daily needs of the human being is to consume food. Eating is also a source of pleasure and thus attachment. It engages the senses, conditioned preferences, aversions, personal choices, judgments, and social decisions many times over the course of the day. Patterns and habits around food and eating are established early in life and represent one of the most universal experiences, culturally embedded yet highly personal. Being in "right" relationship to food was one of the core struggles of Gotama Buddha, as he came to the realization that the strict asceticism of the Yogic path was not the road to enlightenment, and as he began to preach the "middle way (*majjhimā paṭipada*)." In our contemporary culture, food is plentiful, and the opportunities for indulgence so pervasive that virtually everyone struggles to find a balance, if not in regard to quantity of food, then in regard to the types and quality of the food we choose.

Although almost all of us could identify ways in which we might make wiser or healthier choices about the foods we decide to eat, the individuals with whom we[1] work in our Mindfulness-Based Eating Awareness Training (MB-EAT) treatment program are in almost constant distress in regard to their eating, to food and to their bodies. They suffer from a pattern of compulsive overeating that occurs several times a week and about which they experience a sense of loss of control and substantial depression. They are often seriously obese and have generally gone on many diets, sometimes successfully, but then regain the weight either slowly or quickly after the diet ends. Everyone entering our program craves and loves food, yet they have also created a relationship to eating that they distrust, if not hate. The wheel of life is severely out of balance.

In working with eating problems, we draw the distinction between appropriate – and balanced – use of food and the compulsive patterns that are out of control. Therefore, we are conceptualizing right intention in relation to eating as a motivation to use food wisely, which may include the incorporation of pleasure, moderate desire, and moderate attachment, consistent with a "middle way." The focus on habitual attachments and the means of detaching from them is very important in the application of Buddhist teachings to psychotherapy and especially to the treatment of eating disorders. The Buddha recognized that our thoughts – and our behaviors – are conditioned, that they are very powerfully linked to seeking pleasure or avoiding pain in a way that protects the immediate needs of the self, but which may distort or cloud more enduring needs. In the context that we are exploring here, that of recovery from an addictive or compulsive behavior, we do not mean transcendent or ultimate needs, but rather the very important distinction between immediate cravings, such as an urge to eat an entire box of chocolates, as compared to savoring one or two and then eating healthier foods. Engaging or meeting these enduring needs assumes two principles: that they can be accessed by self-observation, as occurs in mindfulness meditation practice, and that engaging them reflects a more balanced wisdom.

Contemporary cognitive-behavioral therapy (CBT) techniques are also based on the understanding that much of what we experience is conditioned and responsive to experience and to the seeking of pleasure and avoidance of pain or discomfort. Learning theory, in which our attachments and desires are primarily seen as learned behaviors, has contributed substantially to development of effective therapeutic interventions, including treatment of obesity and eating disorders (Fairburn 1995; Agras *et al.* 1997; Wilfley *et al.* 2002). Self-monitoring, used within CBT to help identify conditioned patterns, is nevertheless experienced by many as a burdensome task that is rarely continued outside the therapeutic context, this in contrast to mindful awareness which can be incorporated into moment to moment experience and does not carry the same sense of burden to the individual. In CBT, self-monitoring is then used to inform a plan for changing triggers or substituting alternative behaviors. While CBT has been shown to have considerable value in treating eating disorders and obesity, it is generally not viewed as cultivating "wisdom," but rather serving to assist with the substitution

of more functional but parallel behaviors or responses. This may result in efforts to simply push away patterns of overeating, overindulgence, and over-attachment through overly rigid adherence to structured diets, efforts that may increase a sense of control but provide little balance. These alternatives may be experienced as forced, and as requiring continued effort, rather than emerging from inner experience and therefore are difficult to sustain. Often the person experiences a struggle in creating this shift, rather than a sense of freedom or awakening of awareness.

The use of mindfulness meditation, conversely, appears to assist the individual in becoming aware of how the conditioned mind reacts and then, with purpose, disengage the reactive mind, producing a sense of stillness and clear awareness. Our constructed meanings and habitual patterns associated with eating are a natural target for such meditative interventions. Meditation practice is a powerful tool for cultivating this awareness and the ability to be non-reactive. Although we will primarily be drawing on the tradition of mindfulness or insight meditation in this paper, concentrative meditation also serves to cultivate a still mind, and informs our work. We will argue in this paper that wisdom, in relation to everyday types of activities, emerges from this still awareness. Therefore, stilling the mind allows the emergence of right action (*sammā kammanta*) and right thought, resulting in balance rather than imbalance and distress (*dukkha*).

This is an important difference between meditation-based approaches and CBTs or structured dieting, which seek to directly modify the content of a person's cognitions and behaviors. Mindfulness meditation focuses less directly on changing the contents of our thoughts, emotions and physical experiences, and more on changing our relationship to them. Over time meditation modifies *how* we relate to our thoughts and experiences more than the contents of those thoughts and experiences. It is our contention that by changing our relationship to the contents of our minds, we will affect a modification of our thoughts and feelings and actions themselves. And in addition we argue that the success of meditation-based interventions like the MB-EAT programs demonstrates this. In addition we propose that this change in thought and behavior is due in part to the accessing of a deeper wisdom through the practice of meditation that can be engaged across the full range of human experience and behavior.

## Translating the middle way into a wise relationship with eating: a multi-domain model of meditation

Considering how meditation may be used to treat disordered eating brings up the question of how these therapeutic effects may occur. Numerous models (Benson 1975; Kornfield 1993; Rubin 1996; Austin 1999; Teasdale 1999; Orme-Johnson 2000) have addressed the mechanisms of the effects of meditation within contemporary understanding of psychology and neurophysiology. When reviewing the meditation literature, there is nevertheless some risk of falling into the trap of the "six blind men and the elephant" analogy, with some claiming meditation is

fundamentally a relaxation technique, others that it functions through a change in relation to self, or through cultivation of compassion, or through spiritual awakening. A wide range of meditation effects has in fact been very well documented (Murphy *et al.* 1999), but different types of effects are often treated somewhat separately from a conceptual perspective.

Rather than arguing that each of the types of effects we observe in our treatment program occurs through separate mechanisms, for the remainder of the Chapter I will be proposing that a multi-domain model of meditation is the most useful, not only in integrating the traditional and contemporary meditation literature, but in understanding how a set of relatively simple cognitive processes can produce such a wide range of powerful experiences in regard to disordered eating. The multi-domain model (Kristeller 2004) proposes that the cognitive processes involved in meditative practice, of focusing attention and awareness, and disengaging analytic thought and self-judgment, have impact across all domains of human functioning, because every domain is sensitive to conditioning processes that are suspended or reorganized through the practice of meditation. Even though the domains of functioning can be defined in different ways, it is useful to organize the impact of meditation around the following six: cognitive, physiological, emotional, behavioral, relation to self and to others, and spiritual. While effects in one domain clearly must interact with those in others, these are also areas of functioning that are seen within contemporary psychology to engage somewhat distinct processes. Furthermore, the order of the domains is not arbitrary, but neither are they intended to be hierarchical. Consistent with a model that views meditation as fundamentally a cognitive process (Bishop *et al.* 2004), cognition is placed first. The remainder are ordered to some degree by the ease by which individuals report experiencing them (i.e. virtually everyone reports a sense of physical relaxation after meditating), but given that such experience is highly sensitive to context, for example, a spiritual context or a loving-kindness (*mettā*) meditation, the order of the domains is neither fixed or linear (see Kristeller 2004, for a more detailed overview).

Although eating can be viewed as a fairly primitive behavior – after all, even the lowest organisms consume nutrients – in truth, the process of eating engages all these domains: how we think about food, our physical reactions, the meeting of emotional needs, our actual eating behavior, our sense of self-identity and social needs, and even spiritual values, such as ritual use of food. Paradoxically, the extent to which eating could be reduced to relatively simple components makes apparent the sheer complexity of the conditioned and constructed elements that are layered on top of our basic needs for nutrition. In a food abundant society, with almost an infinite variety of choice, patterns become established that are extremely difficult to disengage. That is why changing our relationship to eating can serve as a good model for the potential of meditation as a means to self-regulation in a variety of domains.

After reviewing the fundamental structure of the MB-EAT program, I will return to review the relationship of the therapeutic process in regard to the multi-domain model.

## Using meditation in therapy: an example from treatment of eating disorders

Eating is immediate, compelling, and laden with conditioning and meaning, and therefore serves as a good path into mindful self-awareness, yet surprisingly little research has been carried out using meditation-based interventions for treatment of eating disorders or obesity. However, the first exercise that Jon Kabat-Zinn (1990) uses in the widely respected (Mindfulness-Based Stress Reduction) (MBSR) therapeutic meditation program at the University of Massachusetts Medical Center (UMMC) is the raisin meditation. The goal of this meditation is to eat this small, dried piece of fruit as mindfully as possible – as if one has never eaten a raisin before. The MBSR program uses this exercise to illustrate how mindful awareness can be brought to every aspect of daily life, and as a way to de-mystify the process of mindfulness meditation that will be introduced to participants over the following 2 months.

While I (JK) was working at UMMC, I was strongly influenced by this approach. I had already been developing a meditation-based intervention for compulsive eaters before I went to UMMC that drew on mantra meditation and relaxation techniques, combined with cognitive-behavior therapy. This intervention was informed by principles of self-regulation (Schwartz 1975, 1979; Carver and Scheier 1981), evidence from sensory deprivation research (Kristeller *et al.* 1982; Suedfeld and Kristeller 1982), and the growing understanding that chronic dieters and compulsive eaters were disengaged from internal self-regulatory systems of eating control and overly influenced by external cues, belief systems, or emotional signals that had become automatic and habitual in their lives (Rodin 1981; Kristeller and Rodin 1989). As I continued to develop this work, I came to feel that mindfulness meditation provided a powerful complement to these approaches (Kristeller 2003), and over the last decade this program has developed into the MB-EAT program, which integrates various meditation techniques, informed by knowledge drawn from experimental and clinical psychology.

The MB-EAT is a nine-week program for individuals with Binge Eating Disorder (BED). In addition to teaching basic mindfulness meditation techniques, it includes a number of focused meditative exercises that engage experiences of hunger, satiety, eating awareness and appreciation, recognition of the distorted thoughts that often accompany urges to eat, and the pervasive sense of self-loathing that individuals with compulsive eating problems often report. In our first study with 18 overweight women who met criteria for BED – that of eating excessively large amounts of food and feeling out of control, generally several times per week – we found that this program significantly decreased frequency and intensity of binging, improved mood, and increased a general sense of self-control and self-worth (Kristeller and Hallett 1999).

We have recently completed a study further evaluating this intervention with obese men and women. All are at least 30% overweight, with an average weight of about 240 lb.; some participants have weighed over 300 lb. for most of their

adult life. Their average age is about 45, and some are over 60 years old. Almost all have a history of trying numerous diets; and many have given up hope of ever having control over their eating; while some are seriously depressed or on medical disability due to their weight, others hold down highly skilled jobs. Quite a few are teachers, nurses or other professionals.

The current treatment program uses a number of meditation-derived practices designed to increase mindfulness. First is training in basic mindfulness meditation techniques – both breath-anchored sitting meditation for about 20 minutes per day, and "mini-meditations." Mini-meditations take from a few seconds to a few minutes, and provide a means to bring focused awareness into the everyday environment. Another element is re-engaging the body through focused breathing, body awareness, and simple yoga movements. Often these individuals hate their bodies, feeling both disconnected from them and totally defined by them at the same time. Meditative breathing serves as both a relaxation component and as an important means (Lehrer *et al.* 1999; Haruki and Takase 2001) of re-regulating the balance of the autonomic nervous system. It increases awareness of basic physiological processes in a way that is not threatening. In addition, different focused meditations are used during each week of treatment. These guided meditations ask participants, in the safe space of the group, to engage focused attention in relation to their experience of food, hunger, feeling full, thoughts about food and eating, and emotions. About half of the guided meditations involve use of actual food, expanding the simple raisin meditation to chocolate cake, cheese, crackers – and a whole meal that participants create themselves. Also important is a forgiveness meditation that raises issues of anger and hurt toward both themselves and to others, and teaches the ability to accept these feelings non-judgmentally. Finally, we engage in what might be called "spiritual wisdom," in which patients are asked to find an inner place of peace and awareness that can connect them to a higher purpose, values and strength. Again, this is based on the Buddhist teaching that there is an inherent process of wisdom within all of us that we can access.

The following represents a focused meditation on the experience of eating (note: the pauses indicated are extended for the length of 3–4 breaths):

> Centering yourself in your chair, in your body, gently close your eyes and bring your attention to your breath. Be aware of your breath moving in, flowing down toward your stomach, flowing out again through your nose . . . Relax your stomach, being aware of the gentle movements up and down . . . Now bring yourself into awareness of a recent time when you were planning to eat . . . Experience it in the present . . . What are you planning to eat? What does the food look like? . . . How did you choose this food? . . . Notice the feelings you are having, the thoughts . . . Are you experiencing hunger? . . . How do you know? . . . What does that feel like? . . . How much hunger are you feeling? . . . Now imagine yourself beginning to eat as you usually do. What is your mouth doing? . . . How

> fast are you eating? . . . What are your thoughts? . . . Continue eating as you usually would . . . You have now eaten most of the food. How full are you? . . . How do you know? . . . What are your thoughts? . . . What are your feelings? . . . What do you want to do now? . . . What is your breath doing? . . . Now bring your attention back to your breath. Take a few slow, deeper relaxed breaths . . . Bring your awareness back to the feeling of sitting in your chair . . . Bring yourself back into the space of the room, and gently open your eyes.

This example (which combines components of several guided meditations that would be used separately in our actual treatment program) is illustrative of several of the domains mentioned above: physical experience, thoughts, and emotion. Another aspect of the meditation is important to note. Whereas this may appear to be a type of guided imagery or even hypnosis, care is taken to be non-directive as to the nature of the experience that may arise or to the interpretation of that experience. No meaning is imposed from without; rather the message is given repeatedly that wisdom can be found within, once the nature of the mind is simply observed, rather than reacted to, and once these patterns of reaction are disengaged. This is clearly consistent with the idea of an inherent wisdom found in many schools of Buddhism (Williams 1989; Gethin 1998). What is being taught are ways of looking for and listening to that wisdom.

## Meditation as a path to wise eating across the six domains

Previously meditation has not been systematically studied as an intervention for eating disorders, although it has been applied to treatment of many of the elements that that are characteristic of such problems, including anxiety (Kabat-Zinn *et al.* 1992), depression (Teasdale *et al.* 1999), addictions (Gelderloos *et al.* 1991; Marlatt and Kristeller 1999), and obesity (Bauhofer 1983). Dialectical behavior therapy, which draws on principles of mindfulness, has also been shown to be effective in treating binge eating disorder (Telch 2001). The mechanisms which are involved in these mindfulness-based interventions include heightened awareness of interoceptive cues, providing an alternative means for relief from distress, increasing personal empowerment/sense of perceived control, cultivating an ability to resist impulsive urges, and a "deconditioning" of habitual behavioral patterns. These processes are all pertinent to understanding the value of mindfulness meditation in treating compulsive overeating. The MB-EAT program can be seen to produce effects across a range of functioning: cultivating awareness (cognition), ability to use hunger and satiety cues (physiological), decreased emotional reactivity, decreased impulsivity (behavioral), a more accepting relationship to self and forgiveness of others, and an engagement of inner meaning and purpose (spiritual). Our more encompassing goal is to lead the individual to recognize a deeper sense of wisdom with which to engage a new relationship to food and to eating.

### *Meditation and cognition*

Meditation is fundamentally a cognitive process, which can be defined as learning to shift and focus the attention at will onto an object of choice, whether on the bodily feelings or to the mind, and to disengage from usual conditioned reactivity or elaborative processing (Bishop *et al.* 2004). In mindfulness or insight meditation, the role of "bare attention" may be one of the most powerful aspects of meditation practice for individuals whose conscious mind is habitually caught up in thoughts and reactions to those thoughts. The mind is designed to construct meaning out of experience and that constructed meaning is encapsulated by conscious thoughts; Buddhist psychology acknowledged the degree to which conditioned desires distort perception. One of the initial effects of meditation is acute awareness of the "monkey mind" (SN.2.94–5), the continuous jumping of thought from one point to another; this is one of the metaphors often brought into contemporary usage from the classical texts. Compulsions and obsessions, such as occur in eating disorders, are often powerfully directed by such thoughts, which the individual experiences as both uncontrollable and as an inherent aspect of "self." Experiencing that these thoughts are "just" thoughts – that they can be separated from the reactions they normally trigger; that they need not be responded to – can be extremely powerful in returning a sense of control to the individual. In his work with depression, Teasdale and his colleagues (1999, 2000, 2002) suggest a model in which mindfulness meditation allows the individual to interrupt cascades of negative thinking that otherwise contribute to psychobiological disregulation and relapse into major depression. In our treatment program, we begin to train the skills of mindfulness immediately, both in relation to eating, first with the raisin meditation and then with more complex eating experiences, that interrupts the cascades of reactions around eating, while providing training and experience in general breath awareness mindfulness meditation. We also introduce the concept that "thoughts are just thoughts" and that one can cultivate control of the process and movement of thoughts as one develops control over attention. One of our patients offered a contemporary metaphor. She regularly used a local indoor shopping mall for walking exercise. When she was "mall walking," she might notice new displays in store windows, but she kept herself from stopping or going into the store, and continued her walking. She noted that this was like mindfulness meditation; she could be aware of intrusive thoughts, but she didn't need to pursue or react to them. After only a few weeks of practice, participants in the MB-EAT program report increased awareness of habitual patterns of reacting to triggers for overeating and are able to experience an increasing ability to sustain moments of detached observation, realizing that they do not need to follow every thought or urge that arises.

### *Meditation and physical response*

In the physical realm, food and eating, in contrast to other addictions, are necessary to basic survival and life. The body contains numerous natural feedback signals

for hunger and satiety for initiating and terminating eating, from the mouth to the gut. These signals are sensitive to blood sugar levels (you will salivate more to a food if you haven't eaten for a while), levels of fat deposits (individuals who are starving will almost always overeat), and hormonal feedback from individual cells of the muscles, fatty tissue, and the liver. At the same time, these signals are highly conditionable and elastic, allowing for overload and flexibility to a degree that other physiological systems, such as our need for sleep or water, do not have. While most of us ignore or override our hunger and satiation signals on occasion, individuals with eating disorders, whether binge eating, bulimia or anorexia, appear to be particularly disengaged from this physiological feedback (Hetherington and Rolls 1988; Hadigan *et al.* 1992). Meditation may therefore be particularly well suited to treating such problems. Unlike other compulsive behaviors in which abstinence is possible (such as smoking, drugs, or alcohol), abstinence is not a possibility. Moderation and flexibility must be learned, and mindfulness meditation techniques appear to be particularly valuable for reconnecting the mind and the body and increasing awareness of some of the physiological processes going on in our bodies. Biofeedback operates under the principle of self-regulation (Schwartz 1975, 1979) which posits that physiological functioning can be re-regulated simply by heightening awareness of the appropriate physiological signals. Meditation has been shown to be as, or more, effective in promoting control of even basic autonomic physiological systems such as heart rate (Cuthbert *et al.* 1981), and has been well documented to lower blood pressure and promote a sense of relaxation by disengaging the hyper-reactivity ("fight or flight" response) that accompanies anxious reactions (Benson 1975; Schneider *et al.* 1995). Individuals in the MB-EAT program often express surprise at how much more sensitive they become to the physical experiences that signal hunger in contrast to emotional experiences, and to experiences of satiety at moderate levels, both in regard to the taste of food and to feelings of fullness.

### *Meditation and emotion*

Meditation was popularized as a stress management tool in the United States in the 1960s and 1970s, first by the introduction of Transcendental Meditation (TM) by the Maharishi Mahesh Yogi (1963/1995) and then by Benson (1975) through his more secularized version of TM which he labeled the "relaxation response." Literature reviews (Delmonte 1987) and meta-analyses (Eppley *et al.* 1989) have supported the value of meditation in decreasing both state and trait anxiety in the general population. Research by Kabat-Zinn and his associates (1992) was one of the first to establish the effectiveness of an eight-week mindfulness meditation program in significantly lowering the anxiety, panic symptoms, and level of dysphoria of individuals with documented anxiety disorders, effects that remained after three years of follow-up (Miller *et al.* 1995). Teasdale and his colleagues (2000, 2002; this volume) recently completed a randomized clinical trial using mindfulness meditation that substantially reduced relapse in individuals diagnosed with chronic depression.

In the case of eating disorders, meditation may provide a particularly powerful way of re-regulating the emotional value of eating. We take a "middle way," in contrast to the many approaches to dieting and weight control that explicitly or implicitly convey the message that eating in response to emotional needs is inappropriate. This is linked to a common misperception that only individuals with eating problems eat in response to stress or for other emotional reasons. In fact, for most individuals, and in virtually all cultures, food is integrally linked to meeting emotional and non-nutritive needs (Kristeller and Rodin 1989; Rozin *et al.* 1999). Food is used for celebration and for comfort. Our preference for sweet and high fat foods is biologically and genetically based, then shaped by our associations between feeding and nurturing as infants and children, and further determined by repeated exposure and cultural patterns. As our concern about weight and dieting increases, our emotional relationship to food may take on a love–hate dimension, with food coming to represent uncontrollable and overwhelming urges. The Buddha linked overeating to other sensual indulgences (MN.1.102). Some of this emotional conflict is driven by investing in excessively stringent and inappropriate "rules" of food intake (i.e. fad diets) or extreme restriction that has little relationship to actual needs for food as an appropriate source of satisfaction. Diets and nutritional programs generally provide little or no guidance for how to manage emotionally linked eating. Mindfulness meditation practice provides a way to bring this pendulum back into balance. Emotional associations to food are powerfully conditioned, and meditation has the ability to facilitate a gentler and more effective disengagement from dysfunctional conditioning than simply taking on a new set of externally constructed and imposed rules. Thus, meditation goes beyond simple relaxation and stress relief to transform our relationship to our emotional life itself and to the emotions associated with eating. At the end of treatment, participants in our MB-EAT program are in general less depressed and less anxious. Yet they also note that they are drawing more pleasure and satisfaction from what they are eating, at the same time being able to better resist indulgences that their "wiser" mind recognizes as harmful or excessive. They seem to have been able to separate emotional "wanting" of food from how much they "like" food, a distinction that actually appears to have different underlying neurophysiological processes involved (Berridge 2004). One could interpret this as being more in the "moment" with the actual experience of eating, rather than engaged in the associated attachments and desires.

### *Meditation and behavior*

What is "right action?" How does meditation practice promote this? Participants in our treatment programs (Kristeller and Hallett 1999; Kristeller *et al.* 2004) report profound differences between their ability to change their eating patterns through using mindfulness techniques in contrast to using a prescribed "diet." First, they find that their meditation practice allows them to simply observe their own behavior in more helpful ways, as illustrated by something as simple as

paying attention to eating a raisin. They are able to be "in the moment" with their eating rather than being caught up in the constructed associations, both positive and negative, that food and eating engender. By learning to disengage from emotional and cognitive compulsions, they can see eating as just eating, and food as just food. Therefore, they can experience an urge to binge without having to act on it. Marlatt (Marlatt and Kristeller 1999) refers to this as "surfing the urge." Not only does the experience change, but behavior follows. About half way through the program, the homework assignment is to have a meal at an "all-you-can-eat" buffet. Going to such a buffet is a frequent indulgence for many binge eaters; it is a socially acceptable way to overeat, yet all of our program participants recognize it as problematic, and no diet program ever recommends doing this. So people react with surprise and often anxiety at being challenged to do so. Yet they go – and return with a greater sense of control that comes from a new sense of inner wisdom. They find they can use their new skills of mindfulness and awareness to make choices that are satisfying but not excessive. This greater sense of inner control also transfers to more ordinary triggers for binging. Both of our studies to date (Kristeller and Hallett 1999; Kristeller *et al.* 2004) show a decrease in frequency of binge eating from more than every other day, to about once per week, and the size of binges substantially decreased.

### *Improved self-concept and relation to others*

A somewhat more elusive effect of mindfulness meditation is to improve self-concept and self-acceptance, areas that are often disturbed in individuals with compulsive eating problems. Bono (1984) found that a group of novice TM meditators appreciably improved their self-concept in relation to a group that simply sat and relaxed for the same length of time. A more recent study (Easterlin and Cardena 1998) found that more experienced meditators in the Vipassana tradition reported a higher sense of "acceptance" when under stress than did less experienced meditators. Kornfield (1993) has written eloquently of meditation as a path to loving kindness and to opening the heart. Carson and his colleagues (2004) found that a loving kindness meditation program improved relationships between married couples, even when the quality of the relationship was already high.

Several elements of our program are designed to contribute to the process of engaging relationship to self in a healthier way. As the group progresses, meditation is focused less on food per se, and more on the types of cognitions and emotions related to eating out of control. Many of these involve becoming aware of self-hatred and disgust, particularly in relation to their bodies, but also more generally. Individuals become detached from their craving of food and compulsive eating because they recognize their compulsive thoughts about eating as ephemeral, rather than as parts of "self."

The experience of the group meal, eaten partly in silence, common to contemplative traditions, is also compelling for many of our participants. They both

appreciate the social pressure to overeat and the distraction that social conversation contributes, but also gain an appreciation for the social engagement and the challenge to maintaining mindful eating when surrounded by friends or family.

In keeping with contemporary applications of Buddhist teachings to therapeutic usage (i.e. Kornfield 1993; Carson *et al.* 2004), meditation also appears to promote the ability to re-engage parts of the self that are more loving and appreciative of others, once negative preoccupations with self have been disengaged (Kristeller and Johnson 2005). For example, group members often express powerful feelings of connectedness to each other, a connection that is not as evident in our control treatment groups (who use an educationally oriented approach but have about as much group discussion and sharing).

### *Meditation and spiritual growth*

Although meditation practice is traditionally identified with spiritual and religious goals, virtually all of the contemporary empirical research on meditation, at least in the United States, has attempted to secularize meditation practice and document effects across other areas of functioning as noted earlier. However, attention to spirituality as an appropriate and meaningful focus for therapeutic engagement has been growing rapidly, both in general and in relation to meditative practice (Marlatt and Kristeller 1999; Sperry 2001). Measures of spiritual well-being that can be used outside of particular religious belief systems are being developed (e.g. Peterman *et al.* 2002); use of these is beginning to document increases in spiritual growth in response to meditation practice even without an explicit focus on this aspect of experience. A recent randomized study (Shapiro *et al.* 1998) with medical and premedical students showed substantial and consistent changes across all measures of well-being, including increased spirituality, in those participating in a seven-week mindfulness meditation program. Similar effects have been documented with medical populations (Kristeller *et al.* in press).

In the final session of the MB-EAT program, we explicitly call on participants to identify or access what they have experienced as a sense of spiritual or religious strength. This often is identified as a higher – or deeper – connection to a power that enables disengagement from the conflicts related to food, which leads to wiser choices. Throughout the program there is no explicit teaching or indoctrination about spirituality. Rather, these new perceptions and awareness, which some participants themselves identify as spiritual, arise naturally in the course of their meditative explorations. In this way, and in keeping with some aspects of Buddhist teaching, the previously described effects of meditation (increased awareness of physiological cues, transformed relationship to habitual thoughts and feelings) may be seen as preparing the way for the development of spiritual wisdom in that an increased ability to suspend preoccupation with eating and dieting allows engagement of the spiritual domain.

## The experience of practice

Traditionally, meditation is discussed in terms of two complementary goals: stillness (*samatha*) and mindfulness/insight (*vipassana*),[2] which were usually understood to operate sequentially (Gethin 1998: 174–175). In our program, we introduce the experience of mindfulness immediately, but use the focus of the breath, body experiences, and the experience of eating as ways to cultivate stillness and one-pointedness (*samādhi*). Almost immediately, our participants note the difficulty of quieting the mind and staying with the breath during the mindfulness sitting meditation, but they find it much easier to stay attentive to their experiences of eating. Therefore, the broader scope of their practice is inherently somewhat limited. Yet they also frequently comment on a growing ability to cultivate broader awareness, of being aware of greater insight into other areas of their life, and of being able to find a place of inner calmness. These changes occur relatively quickly. Although it is sometimes presumed that extended meditation practice is needed for meaningful change, the experience of our participants is consistent with much of the research on the therapeutic uses of meditation (Kabat-Zinn *et al.* 1992; Teasdale *et al.* 2002), which suggests that valuable effects can be obtained within 8 weeks of practice.

In respect to the traditional basis of practice, we are careful to avoid all direct exploration or discussion of our program in terms of Buddhism or Buddhist principles such as not-self (*anattā*). Virtually all of our group participants are Christian or Jewish in background, and most are actively involved in religious practice within these traditions. When we first introduce them to the concepts involved in the MB-EAT program, we do so in a private orientation session in which we inquire into any concerns they might have about learning or practicing meditation. We have found this to be particularly important in religiously conservative communities. We discuss meditation as a way of engaging the mind and we frame it as a psychological practice involved in finding "inner" wisdom. We also point out that most religious traditions, including Christianity and Judaism, have developed meditative-type practices because they are helpful in managing difficult or painful experiences and in finding sources of strength (Goleman 1988; Gross and Muck 2003). We are quite careful to express respect for whatever religious or spiritual tradition the participant may have. These approaches appear to reassure our participants and leave them open to engage with the practices required in the program.

## The cultivation of wisdom

The concept of wisdom is increasingly being examined as a psychological construct (Sternberg 1990, 1998), but often in a more limited way than within early Buddhist psychology. From a psychological perspective and in keeping with the notion of inherent wisdom found in many schools of Buddhism (Williams 1989; Gethin 1998), we propose that "wisdom" is an emergent process that

occurs when the habitual, generally self-protective reactions of the conditioned mind are suspended, allowing integration of more complex processing to occur. This can be seen as parallel to the traditional categories of "stillness" and "insight." Stillness involves suspending the mind's habitual patterns; insight refers to the more complex, creative, and "deeper" levels of processing that emerge as a result of the ensuing mindfulness practice. This type of "wisdom" can therefore occur within any domain of functioning and need not entail intellectual processing, as is often implied in Western concepts of wisdom. Often, while meditating, the result of this process is experienced as a sense of "knowing" – a sense of realizing a true or wise perspective on a problem, or source of suffering, for oneself. The actual content or problem solved may not be profound (i.e. what to eat at a meal), but the solution is experienced as balanced and unconflicted. This is in keeping with the emphasis in Zen on elevating mundane and ordinary aspects of life to expressions of wise action such as occurs in the Japanese tea ceremony or flower arranging. To the extent that insight into how to create balance or solve a problem involves disengagement from habitual patterns and seeing the problem in a larger perspective, it is in continuity with the Buddhist concepts of insight, wisdom, and spiritual growth (Kornfield 2000).

Craving often reflects movement toward an ephemeral source of satisfaction, which then quickly leads to distress once the initial pleasure is gone. In working with eating problems, we draw the distinction between appropriate – and balanced – use of food and the compulsive patterns that feel out of control. This focus on habitual attachments and the means of detaching from them is very important in the application of Buddhist teachings to psychotherapy and especially to the treatment of eating disorders. Individuals become detached from their craving of food and compulsive eating because they recognize their compulsive thoughts about eating as ephemeral, rather than as parts of "self." In addition, Buddhism teaches that since we desire hedonic pleasure, security, power, affiliation, and other such things, we see reality, including the reality of who we are, as more stable than it really is. Intending to end craving is a part of wisdom, because the state of detachment is the state of clear perception and knowing and wise acting.

In order to perceive reality without the clouding effects of compulsive desire, the individual must be able to be aware of how the conditioned mind reacts and then, with purpose, disengage the reactive mind, producing a sense of stillness and clear awareness. Meditation practice is a powerful tool for cultivating this awareness and the ability to be non-reactive. In our experience wisdom, as we understand it, emerges from this still awareness. Therefore, stilling the mind allows the emergence of right action and right thought, resulting in balance rather than imbalance and distress, not only within what is considered spiritual experience, transcendence, or enlightenment, but across all domains of one's experience. While effects may not be as pervasive and profound as those experienced by more experienced practitioners, they are often strikingly powerful in regard to producing therapeutic effects.

In much of Buddhism, wisdom is not a set of concepts or a philosophical-religious doctrine. Wisdom, rather than coming from reading inspired books or listening to enlightened teachers, emerges as a result of practice. Wisdom is a process of transformation that puts the practitioner in a psychological and spiritual position to experience reality clearly and calmly. Much Buddhist thought suggests that as one clears away compulsive patterns of thinking and acting, wiser decisions are made. Our research (Kristeller and Hallett 1999; Kristeller *et al.* 2004) on using meditation in the treatment of eating disorders illustrates this process. Rather than challenging compulsive eaters to change their behavior, we give them the tools to observe the self more gently, and more fully, particularly in regard to those situations that trigger automatic and conditioned reactions.

Thus much Buddhist psychology has a great deal in common with contemporary applied psychology. In this article and in our psychotherapeutic work, we are drawing on those schools of Buddhism that suggest human beings possess an inherent wisdom that is hidden by our conditioned desires and cravings. Buddhist psychology also posits that it is over-engagement with distorted views of self that leads to suffering. Through the practice of mindfulness and the other aspects of the Eight-Fold Path, we can uncover that inherent wisdom that is our natural legacy. The claim that transformation comes through experiential insight, leading to changes in behavior, echoes the presuppositions found in many psychotherapeutic systems, including self-psychology (see Brazier 1995; Epstein 1995; Rubin 1996) and cognitive-behavioral approaches (Kwee and Ellis 1998; Teasdale *et al.* 2000). The question at the interface of Buddhist teachings and clinical psychology is how the early Buddhist theory of mind and the system of practices might be applied to the treatment of specific disorders. MB-EAT is one example of this application.

The multi-domain model of meditation presented in this chapter provides a way to understand psychologically some of the connections between the practice of meditation and the development of wisdom. If wisdom is understood as a process of discovering perspective and balance, rather than as a set of philosophical constructs, or as simply an intellectual attainment of a higher understanding, then it becomes possible to wisely and mindfully engage each of these psychological domains (cognitions, feelings, behavior, physiology, sense of self, and spiritual). Wisdom is primarily a process, not a set of external concepts or rational perspectives. It involves, among other elements, the capacity to see clearly, face reality, and make more balanced decisions. Buddhist thought suggests that as one clears away compulsive patterns of thinking and acting, wiser decisions are made. The MB-EAT program illustrates this process. Rather than admonishing or challenging compulsive eaters to change their behavior or giving them specific diets to follow, we give them the tools to observe the self more gently, and more fully, particularly in regard to those situations that trigger "mindless" eating or that override natural signals to stop eating. The results of this treatment program are evidence for the notion of an inherent wisdom that emerges when compulsive thoughts or urges are mindfully observed, rather than being engaged with or reacted to.

Mindfulness meditation facilitates this wiser engagement with our psychological life by training us to approach our experiences and challenges within each of these domains from a more disengaged position, stilling the mind so a deeper and more balanced perspective can emerge. Mindfulness meditation is far more than a technique for achieving relaxation or countering stress; it can most substantially be considered a means to a deeper exploration of the mind and to discovering inherent wisdom.

## In summary

Understanding and engaging the processes of eating from a Buddhist meditative perspective has proven to be a particularly powerful means for exploring the potential of mindfulness meditation as a therapeutic tool and as a path to wisdom in every domain of human functioning. The process of eating and our relationship to food and our bodies can be seen as engaging a wide range of physiological and psychological conditioning. If meditation is conceived as a way to disengage ourselves from the wheel of saṃsāra, that is from the bounds of endless conditioning, while allowing a full engagement with life in the moment, then examining how we relate to food brings us right up against many of these issues. Examining these processes in relation to such a common, universal, everyday experience as eating may be valuable in understanding the power of the meditative process in creating wisdom in other areas as well.

## Notes

1 The MB-EAT program was developed by Jean Kristeller, the first author; James Jones, the second author, has consulted to the program and uses related approaches for treating compulsive eating problems in his private practice.

2 We are aware of the difference between mindfulness (*sati*) and insight (*vipassana*) as seen in the Pāli suttas in that the practice of mindfulness results in insight. It is for the sake of simplicity that we here conflate the two.

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# 19

# MINDFULNESS MEDITATION IN THE PREVENTION AND TREATMENT OF ADDICTIVE BEHAVIORS

*Sarah Bowen, George A. Parks, Anil Coumar, and G. Alan Marlatt*

The purpose of this chapter is to explore the contribution of Buddhist psychology, specifically mindfulness meditation practice, to psychological interventions aimed at the prevention and treatment of addictive behaviors (Marlatt 2002). We approach this topic as clinicians and researchers trained in the "scientist practitioner" model, a tradition in which psychological research is guided by its relevance to clinical practice, and clinical practice is informed by research on the efficacy and effectiveness of psychological treatments. However, in the context of this chapter, our ongoing personal practice of meditation and study of Buddhism has an additional influence on our perspective. Jon Kabat-Zinn, a pioneer in applying mindfulness-based interventions to chronic pain, has discussed the importance of personal meditation practice for clinicians delivering mindfulness-based interventions:

> In our experience, unless the instructor's relationship to mindfulness is grounded in extensive personal practice, the teaching and guidance one might bring to the clinical context will have little in the way of appropriate energy, authenticity, or ultimate relevance, and that deficit will soon be felt by program participants.
>
> (Kabat-Zinn 2003)

The same might also be said for those developing and researching mindfulness-based therapies.

Consistent with our three-fold focus on research, clinical work, and personal meditation practice, this chapter addresses past research of mindfulness-based practices and meditation techniques, theoretical and clinical integration of Buddhist and Western perspectives, and the possible mechanisms of action in

treatment of addictive behaviors. We discuss where a Buddhist perspective fits into the current predominant Western views of addiction. In addition, we describe the development of a Mindfulness-Based Relapse Prevention (MBRP) program.

## The psychology of addictive behaviors

Substance use disorders are the most frequently diagnosed psychiatric disorders in the United States and the most frequent co-occurring disorders when mental disorders are the primary diagnosis (Grant *et al.* 1994). Epidemiological data from the World Health Organization (WHO) indicates that alcohol and drug abuse and dependence represent a significant public health problem worldwide (WHO 1999). The United Nations Office for Drug Control and Crime Prevention estimates that as many as 185 million people worldwide are current drug users (UNODCCP 2002), many of whom suffer from substance-related negative effects to varying degrees.

Problems stemming from addictive behaviors range from occasional mild negative consequences to clinical syndromes labeled as substance abuse or dependence. The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR 2000) describes substance abuse as, "a maladaptive pattern of substance use, manifested by recurrent and significant adverse consequences related to the repeated use of substances" (198). To meet the diagnostic criteria, a user must have one or more of the listed symptoms, including repeated failure to fulfill major role obligations, repeated use in situations in which substance use is physically hazardous, multiple legal problems, and recurrent social and interpersonal problems. Substance dependence is considered a more chronic condition than substance abuse, characterized in part by preoccupation with acquiring and using the drug, a pattern of unsuccessful efforts to cut down, and the physiological symptoms of tolerance and withdrawal. To meet the diagnostic criteria for a substance dependence disorder, an individual must have three or more of a total of seven symptoms.

Our approach to health problems classically called "addictions" is to view them within the broader conceptual framework of "addictive behaviors." We define addictive behaviors from a social learning point of view as habits characterized by intense, immediate rewards that increase pleasure and decrease pain (Marlatt 1992). These rewards serve to maintain the excessive frequency, intensity, and duration of the addictive behavior habits, despite delayed negative consequences to the users and to others. Addictive behaviors are complex psychological disorders with underlying biological, psychological, social, and spiritual components. From a social learning point of view, addictive behaviors are maladaptive coping strategies used to deal with unwanted thoughts or negative affect by providing an immediate and powerful change in the user's thoughts, emotions, or sensations. Addictive behavior can take the form of substance use (e.g. alcohol), relational issues (e.g. relationships, sexual addiction), or behavioral addictions (e.g. stealing, shopping, gambling). This chapter will focus on primarily substance use; however, the

theories of etiology and treatment presented in the chapter apply to any form of addictive behavior.

## Conceptual models of addictive behaviors

While only a few conceptual models dominate Western psychology and culture today, there are several different conceptual and treatment approaches to addictions. A model of helping and coping created by Brickman and his colleagues (Brickman *et al*. 1982) clarify four divergent conceptual approaches to the development and treatment of addictive behaviors. Brickman and his associates asked the following two questions: (1) To what extent is a person considered responsible for the initial development of the addiction problem? and (2) To what extent is a person responsible for changing the behavior or solving the problem? Based on answers to these two questions, four general models of helping and coping emerged which we will apply to the issue of addictive behaviors. These four models include (1) the *moral model*: the person is held responsible for both acquiring and changing the problem behavior; (2) the *disease* or *medical model*: the person is held responsible neither for the acquisition nor the change of the problem behavior; (3) the *spiritual* or *enlightenment model*: the person is held responsible for the development of the problem behavior, but relies on a "Higher Power" or spiritual beliefs to change; and finally, (4) the *compensatory* or *cognitive-behavioral model*: the person is not held responsible for the development of the problem behavior, but is seen as responsible for changing the problem and considered capable of doing so.

In the *moral model*, addictive behavior is seen as an indication of weak character or a failure of willpower. Individuals engaged in addictive behaviors are admonished to get control of themselves and their failure to change is seen as due to a lack of effort or due to efforts that are misplaced, and therefore, futile. A person's failure to change their addictive behavior patterns is considered to be his or her own fault and this "bad" behavior is deserving of punishment, if it persists. The Temperance Movement in the United States in the late nineteenth and early twentieth century and the legal sanctions of the current American *War on Drugs* are examples of the moral model. This model places a stigma on those suffering from addictive behavior problems often causing shame and guilt; they fear detection of their alcohol or drug use, avoid admitting they have a problem and often fail to seek treatment.

The remaining three conceptual models in Brickman's typology dominate treatment approaches to addictive behaviors in the United States. The disease model, traditionally delivered with the 12-step approach, and the compensatory model, as exemplified by Cognitive-Behavioral Therapy (CBT), are currently the most prominent in the United States, and are the models we will focus on. These models conflict with each other on both practical and theoretical levels, and have sustained continuous debate over the last several decades.

Although Brickman distinguishes the disease from the spiritual model, they are regularly combined in the 12-step framework, in which lifelong abstinence is the

basis for substance abuse treatment and recovery. Treatment delivered within the 12-step framework is by far the most predominant modality in the United States for addiction, and utilizes the medical or disease model in a variety of ways. Standard addiction treatment within the 12-step framework (e.g. Alcoholics Anonymous (AA), Narcotics Anonymous, and Cocaine Anonymous) contends that alcoholism and drug addiction are diseases of chemical dependency that, like cancer or diabetes, are caused by genetic or biological factors beyond the person's control (Jellinek 1960). Addiction is viewed as a dichotomous state; one is either an addict or a non-addict, and as an addict, one is either actively using or completely abstinent. Recovery requires surrendering one's own personal power to a "Higher Power" through which one can restore one's sanity and health. Implicit in this viewpoint is the assumption that afflicted individuals do not have the capacity to change their own thoughts, emotions, or behaviors. Their only hope is to surrender, admitting powerlessness over their situation, cravings and addictive behaviors, and relinquishing personal control to a power greater than themselves.

According to this belief, if an individual has the genetic/biological misfortune of this disease, it can never be cured, and can only be managed through a commitment to complete abstinence. Implicit in this model is the intolerance of any lapses in abstinence. The AA expression, "one drink is too many, and a thousand isn't enough" illustrates the mind-set that one drink delivers the addict back to a bottomless appetite for alcohol that is uncontrollable and insatiable. Although remission from the disease is possible, an "alcoholic" or "addict" will always be subject to the progressive disease process. Anything less than full admission of this disease and acceptance of all that it implies indicates that the individual is in denial, as expressed in the AA saying, "We have a disease that tells us we don't have a disease."

The predominance of the disease model is reflected in the views of the National Institute on Drug Abuse (NIDA), a branch of the National Institutes of Health (NIH), which is the principal biomedical and behavioral research agency of the US Government. NIDA defines addiction as a "chronic, relapsing and treatable disease" with physiological components that constitute a chemical dependency. Drug use interferes with normal brain functioning, affecting long-term brain activity and metabolism. "Those addicted to drugs suffer from a compulsive drug craving and usage and cannot quit by themselves. Treatment is necessary to end this compulsive behavior" (NIDA 2004).

While the disease model is pervasive throughout the field of medicine and psychology, there is also a substantial and growing body of research in support of a cognitive-behavioral view of the etiology and treatment of addictive behavior (Carroll 1996; Kadden 2001; McCrady and Ziedonis 2001). While many characteristics of the DSM's description of addiction reflect the traditional Western medical view, aspects of a cognitive-behavioral view of addictive behavior are also represented. Reflecting the disease perspective, the DSM defines substance abuse and dependence by a list of symptoms, assigning a diagnosis depending on number and type of symptoms endorsed. Individuals are diagnosed in a categorical,

dichotomous system, in which they either meet criteria and thus have the disorder, or they fall short and are deemed non-disordered. However, DSM's allowance for degrees of the disorder (i.e. a lower level of addiction might be classified as abuse, and more severe addiction as dependence), and inclusion of cognitive and behavioral processes, use of behavioral consequences as descriptors, and lack of "disease" label are familiar to the cognitive-behavioral model.

The cognitive-behavioral viewpoint acknowledges multiple possible biopsychosocial causes of addictive behaviors, including biological vulnerability, social, and psychological factors. Treatment therefore includes different points of entry into the dysfunctional system. Cognitive processes such as self-efficacy, locus of control, alcohol expectancies, and coping skills are targeted. The cognitive-behavioral view supports a continuum model, in which there is a range of positive and negative consequences, rather than the dichotomous perspective of the disease model. Treatment allows for more flexibility and recognition of improvements or outcomes that do not necessarily demand complete abstinence, as reflected in the harm-reduction approach. This is the vantage from which we come to this field, and from which we are working to integrate Buddhist philosophy and practice into our work.

Much of addictive behavior treatment delivered from a cognitive-behavioral point of view is derived from Marlatt's relapse-prevention model (Daley *et al.* 2002; Marlatt *et al.* 2002). As with the disease model in Brickman's typology, the individual is not seen as responsible for the development of an addictive behaviors problem; it is not their fault that they have developed the problem. However, contrary to the disease model, afflicted individuals are seen as capable of taking responsibility for successful change by developing the required motivation, and gaining knowledge about patterns of alcohol and drug use, and to learn and practice application of cognitive and behavioral coping skills aimed at relapse prevention. If a lapse does occur, relapse management can be implemented to institute damage control so a full-blown relapse doesn't occur.

Relapse Prevention Therapy (RPT; Marlatt *et al.* 2002) consists of coping skills training, cognitive therapy, and lifestyle modification. *Coping skills training* strategie*s* include both behavioral and cognitive techniques. *Cognitive therapy* procedures are designed to provide clients with ways to reframe the habit change process as learning experience with errors and setbacks expected as mastery develops. Finally, *lifestyle modification* strategies such as meditation, exercise, and spiritual practices are designed to strengthen a client's overall coping capacity. In clinical practice, coping skills training forms the cornerstone of RPT, teaching clients strategies to (a) understand relapse as a process, (b) identify and cope effectively with high-risk situations, (c) cope with urges and craving, (d) implement damage control procedures during a lapse to minimize its negative consequences, (e) stay engaged in treatment even after a relapse, and (f) learn how to create a more balanced lifestyle (Parks *et al.* 2001).

The cognitive-behavioral viewpoint allows for flexibility in the conceptualization and description of addictive behavior. This perspective views addictive behaviors

as occurring on a continuum of use and severity of consequences, ranging from abstinence to non-problematic use, to a threshold of mild to moderate negative consequences, and on to higher quantity and frequency of use often associated with growing negative consequences that can be diagnosed as substance abuse or dependence disorders (Institute of Medicine 1990). This continuum of use and harmful consequences of addictive behaviors as a foundation for alcohol and drug treatment contrasts sharply with the dichotomous view of the disease model. The harm reduction model (Marlatt 1985) is also based on this continuum perspective. A harm reduction approach aims to lessen negative consequences of use, with a focus on lessening physical, emotional, and behavioral costs to the user, rather than demanding total abstinence as the first step.

In many respects, the conceptual foundations of CBT and 12-step Model Treatment of substance abuse can be placed at opposite ends of a continuum, with CBT approaches focused on skills training and identifying and coping effectively with cognitive and behavioral factors that precede alcohol or drug misuse (e.g. high-risk situations such as negative affect, low self-efficacy, poor coping, and positive expectancies, etc.), and 12-step treatment focused on one's acceptance of having an incurable and progressive disease and seeking a spiritual awakening including surrender to a "Higher Power" as the only means of salvation. Despite these polarized conceptual foundations, recent research demonstrates that both can be effective treatments for alcohol and drug problems (Project MATCH Research Group 1998; Moos *et al.* 1999) and that the likely mechanisms of change for both treatments platforms have considerable overlap (Morganstern *et al.* 1997).

Because this chapter addresses integration of a Buddhist perspective into the conceptualization and treatment of addictive behaviors, we will consider the commonalities and differences between these prominent Western views and basic tenets of Buddhism. Fundamentally, the disease perspective and Buddhist views of addiction are disparate in their conceptualization and treatment of addictive behavior. Whereas the disease model states that the root of the problem stems from biological or heritable causes, a Buddhist perspective contends that the root of addiction comes from a lack of awareness. The addict, in the Buddhist perspective, has the "wrong view," and can move toward a more enlightened state through understanding of the Four Noble Truths. The Noble Truths acknowledge the reality of suffering, craving as its cause, the cessation of craving as the remedy for suffering, and the Eightfold Path, including meditation practice, as the way out of the cycle of suffering (Marlatt 2002).

The disease and Buddhist perspectives are also divergent in their views regarding treatment of addictive behavior. The notion of a higher power that is core to the 12-step treatment approach is not present in the Buddhist perspective. From a Buddhist view, power for change comes from awareness, and finding ways for the individual to deal with ego-based urges and cravings. Change is possible not through relinquishing power to a higher being, but through a deeper understanding of the root of addictive behaviors.

Comparison of a Buddhist view to a cognitive-behavioral perspective on addictive behaviors yields more common elements than comparison to the disease model. Perhaps the most fundamental of these commonalities is the focus on the function versus the form of addiction. Whereas the traditional medical model is focused primarily on the form of addiction, that is, description of the overt, resulting behaviors, both the cognitive-behavioral model and the Buddhist perspective focus on the function of behavior of addictive behaviors, that is, an individual's attempts to seek pleasure and avoid suffering through use of substances. These perspectives focus on the motivations behind substance use, rather than on quantity or frequency of use and related consequences. Cognitive-behavioral theories focus on function of addictive behaviors, often used as a self medication for negative emotions and a coping mechanism to deal with stress and its distress. A CBT approach might ask (1) What are the functions this addictive behavior plays in the life of the individual; (2) What patterns of emotion and thinking precede and follow alcohol and/or drug use; and (3) What is the history of the person's addictive behavior pattern and other destructive behaviors. Similarly, a Buddhist approach would examine the root causes and motivations behind an addictive behavior, with an eye on the basic causes of craving and human suffering, rather than a focus on specific symptoms and outcomes.

Similar to the harm reduction model, the Buddhist notion of the "middle way" allows for a continuous, rather than dichotomous, conceptualization and treatment of addiction. This perspective sees substance use as part of a host of possible attachment or avoidance-based behaviors.

The Buddhist view is arguably in greater agreement with the cognitive-behavioral view than with the disease model; however, there are fundamental differences between the two. Traditional cognitive therapy (Beck 1979) endeavors to change the content of thoughts, and eventual beliefs, about oneself, others, and the world. Buddhism does not seek to alter content; rather it allows a radical acceptance of what is, and changes our relationship to that reality. The focus is on staying in the present, with a sense of compassion for what we are experiencing, however uncomfortable it might be. This difference between the two approaches is where the potential lies in integrating the perspectives, and the underlying similarities provide a framework in which to do so.

## Buddhist philosophy and addictive behavior

There are a number of areas where Buddhist philosophy and mindfulness meditation contribute to increasing our understanding and treatment of addictive behaviors. Central to these is the Buddhist understanding of the concept of "craving." From a Buddhist perspective, craving is considered the basis of addictive behavior. Craving is the mental habit of insatiable longing for what is not, which implies an equal dissatisfaction with what is.

We all experience craving on some level, whether we are seeking pleasure or attempting to avoid an uncomfortable state, through food, sex, entertainment,

social interaction, sleep, substance use, or exercise. It is a central tenet of Buddhism that an excess of pleasure is painful. Addiction can be understood as desire that has gone beyond the limit of healthy, self-caring behavior. As with the behavioral view, it is, in this sense, only further along the same spectrum of pleasurable or avoidance-driven behavior that people participate in every day. These behaviors become problematic, however, when they grow out of control and the user surrenders to the craving and begins to believe that existence without the fix is unbearable.

The WHO International Classification of Diseases ICD-10 draft (1993) and DSM-IV-TR (2000) list several symptoms of substance dependence related to the phenomenon of "craving." In a Buddhist conception of craving, there is a marked attachment to the habit of seeking sensual gratification. People with addictive behavior problems engage in substance use or other behaviors to experience pleasurable sensations and emotions, and to reduce pain or unpleasant states. This ego-based attachment to craving often supersedes the knowledge that using alcohol and drugs as coping tools will reinforce the substance's power over them, and ultimately increase their pain and suffering.

The Buddhist view of human psychology as driven by craving, manifest as desire or aversion, is clearly illustrated in the cyclical behavior of addiction. A person suffering with an addictive behavior often vacillates back and forth between craving and aversion. When he or she experiences a trigger, the experience of craving becomes overwhelming. That is often followed by the substance-induced high, and an attachment to that altered state. Coupled with that attachment is an aversion to the impermanence of the high, and to the subsequent discomfort experienced by coming down from the high.

Author and philosopher John R. Mabry's (n.d.), description of the cycle of craving illustrates a Buddhist view of addiction:

> With most of us trying to fill the void within us with whatever promises to take away the angst of existence so common to us in the West, however temporarily. We crave something beyond our experience, and the pain of that longing haunts us in every lonely moment, every empty victory, every success or acquisition which can only disappoint us when the smoke of novelty clears and we find ourselves alone again with our dissatisfaction.

The renowned Buddhist text, *The Dhammapada*, tells us that "from craving arises sorrow and from craving arises fear" (Mascaro 1973: 66).

Deeper still is the attachment a person develops to the condition of craving itself. The object of craving is secondary, as illustrated in people who abuse multiple drugs or engage in multiple addictive behaviors. These individuals seek to continually maintain the state of craving, because the craving itself produces a pleasurable sensation within them, which they wish to prolong. Hence, the basis of all addictive behaviors from a Buddhist point of view is an attachment to one's

own inner bodily sensations, or craving for the pleasant sensations and aversion to the unpleasant ones. Craving then becomes a habit which the person cannot break. Similar to the development of tolerance (requiring larger doses to achieve the desired effect), the attachment to craving becomes steadily stronger, and he or she becomes increasingly intent on fulfilling it. The greater the craving, the more it leads to unhappiness, as it prevents people from seeing the reality of every moment.

As a user seeks comfort or escape in a substance as temporary alleviation of suffering, the level of suffering may actually increase. The Buddhist perspective is that the choice to take this path is due to ignorance of what will truly make the person happy. The true refuge is in the Four Noble Truths, which lead to a true understanding of addiction (Marlatt 2002).

The First Noble Truth of Buddhism is the truth of suffering, stating that everyone everywhere experiences suffering; it is part of being alive. The second truth states that the root of suffering is attachment or aversion. Our desire to have what we cannot or do not have, the desire to fulfill what cannot be fulfilled, or the desire to escape present sensation is what causes our suffering. The Buddhist idea of "false refuge" states that addiction is a misguided form of escape or relief from suffering and comfort that will inevitably lead to increased suffering (Groves and Farmer 1994).

According to the Four Noble Truths, when people spend all their energy chasing after what they think they need, they continue the cycle of suffering. The Third Truth states that there is a way out. To eradicate suffering and craving, we must let go of the illusion of needing to change or escape the present situation. Finally, the Fourth Noble Truth shows the way out to be via the Noble Eightfold Path, which can free us from these habits and patterns that bring us such suffering. One of the hopes for the study of integrating Buddhist principles into Western psychology is to elaborate on how the Buddhist analysis of craving can enhance current approaches to substance abuse treatment.

## The development of mindfulness-based psychological treatments

The application of Buddhist principles to Western psychotherapy has increased in recent years, especially with developers of CBTs that incorporate mindfulness exercises, including Dialectical Behavior Therapy (DBT; Linehan 1993) for Borderline Personality Disorders, and Acceptance and Commitment Therapy (ACT; Hayes *et al.* 1999). A recent edited volume entitled *Mindfulness and Acceptance* (Hayes *et al.* 2004) presents treatments with mindfulness components or mindfulness-based treatments for a variety of areas of problem behaviors. These practitioners have used meditation as an adjunct to psychotherapy, developed psychotherapies with mindfulness training components, and conducted research on meditation practice and effectiveness of the various treatments being developed. Some have argued that mindfulness is a core psychotherapy process common to all successful treatments (Martin 1997).

Most relevant to our attempts to develop Mindfulness-Based Relapse Prevention (MBRP) for addictive behaviors are two mindfulness-based therapies: (1) Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) program for chronic pain among other health conditions (Kabat-Zinn 2003; Grossman *et al.* 2004) and (2) Mindfulness-Based Cognitive Therapy (MBCT) for depression (Teasdale *et al.* 1995, 2000; Teasdale 1999). These mindfulness-based treatments, along with research on the effectiveness of Vipassana meditation as treatment of addictive behavior problems, have provided the foundation for MBRP, to be described more fully later in the chapter (Parks *et al.* 2003; Marlatt *et al.* 2004).

Kabat-Zinn and his colleagues at the University of Massachusetts Medical Center developed MBSR, inspired by Insight Meditation retreats (Goldstein 1976; Goldstein and Kornfield 1987) and Vipassana meditation (Nyanaponika 1962). The MBSR program consists of eight weekly group sessions lasting 2–3 hours, and an additional weekend retreat toward the end of the program offering a more sustained opportunity to practice meditation. MBSR teaches mindfulness meditation including the "body scan" and sitting meditation, hatha yoga, and coping skills similar to those used in CBT. There is now substantial research indicating that MBSR is effective in the reduction symptoms of chronic pain, anxiety, cancer, and heart disease (Grossman *et al.* 2004) as well as improving immune function (Davidson *et al.* 2003).

Particularly relevant to the development of MBRP is a randomized control trial of an intervention based on MBSR called Mindfulness-Based Cognitive Therapy (MBCT) for depression (Teasdale *et al.* 2000; Segal *et al.* 2002). In this prospective study, patients in remission from major depression were randomly assigned to either an MBCT group or a treatment as usual control condition. MBCT groups consisted of 12 patients and were modeled closely after the MBSR program, but with a focus on applying mindfulness practice to preventing depressive relapse. In MBCT, patients are taught to increase awareness of negative thoughts and their association with unpleasant sensations and painful feelings that can precipitate a depressive episode. Patients in the MBCT group with a history of three or more major depressive episodes reduced their risk of depressive relapse by almost half compared to the treatment as usual group over a 60-month follow-up period. Taken together, the impressive results achieved by MBSR and MBCT indicate that mindfulness-based therapies can be effective in reducing the suffering caused by a wide variety of medical and psychological disorders, and that they improve health and well-being.

## Research on Vipassana meditation as a treatment for addictive behaviors

Over the past several decades, Marlatt and colleagues at the University of Washington have been studying meditation and Buddhist practices as a treatment for problematic substance use. Marlatt and Marques (1977) applied a mantra-meditation with high-risk drinkers, and were encouraged by results suggesting

meditation was helpful in reducing excessive alcohol consumption. Marlatt *et al.* (1984) conducted a randomized clinical trial comparing mantra-based meditation training, deep muscle relaxation, and daily quiet recreational reading in heavy-drinking college students. All three groups reported significant reductions in alcohol consumption, and those in the TM group reported the most consistent reductions in alcohol use compared to no-treatment control group participants. Similarly, a study done by Murphy *et al.* (1986) showed that participants in a meditation condition had significant reductions in alcohol use when compared with an assessment-only control group. Subsequently, Marlatt and colleagues have written several theoretical pieces on addiction and meditation (Marlatt 1994; Marlatt and Kristeller 1999), expanding their interest to Buddhism and mindfulness meditation techniques.

In 1999, Marlatt and colleagues at the Addictive Behaviors Research Center at the University of Washington received funding from National Institute of Alcohol and Alcoholism to conduct a study comparing a 10-day Vipassana meditation course, as taught by S.N. Goenka, to a treatment as usual group. The study was conducted with a sample of incarcerated men and women at a King County Jail location called the North Rehabilitation Facility (NRF), north of Seattle, Washington. Data collection began before the men's course held in January 2000 and continued through the last Vipassana course held at NRF, a women's course completed in August 2002. In total, 9 courses – 5 men's and 4 women's – were included in the research study. Previously, research conducted in India with inmates participating in Vipassana meditation courses at a maximum security facility in Tihar found that the course had an effect on reducing recidivism, and increasing positive in-house behaviors (e.g. cooperation). Course participants also demonstrated decreases in psychopathological symptoms (Kishore *et al.* 1995). Encouraged by the results in the India study, Marlatt and colleagues took the opportunity to study the effects of the course on outcomes in the Seattle jail population. The research team was specifically interested in the course's effects on substance use after residents were released into the community (Parks *et al.* 2003; Marlatt *et al.* 2004).

The NRF, where the course was conducted, was a minimum-security coed jail, in which all residents had some history of substance abuse. The current charges included drug possession, driving under the influence or with a suspended license, theft, domestic violence, violation of the uniform controlled substances act, and prostitution. The research was designed to systematically compare Treatment as Usual at NRF with Treatment as Usual plus taking the Vipassana meditation course. Treatment as Usual included an array of rehabilitation programs, such as chemical dependency treatment, alcohol and other drug education, mental health services, cognitive-behavioral programs, adult basic education and GED testing, acupuncture, housing case management, and vocational programs.

As in traditional Vipassana courses, students were fed vegetarian meals, housed in modest fashion, and instructed to refrain from speaking, except for

questions for the instructor, for the ten days of the course. Study participants completed a series of self-administered assessments at four different time points: just prior to the start of the course, immediately following the course, and two follow-up assessments 3 and 6 months after release from incarceration. Areas assessed were primarily basic demographic items (age, gender, ethnicity, education, and employment history), psychosocial areas (e.g. self-regulation, optimism, psychiatric symptomology, and thought suppression), and substance use (types of substances used, quantity and frequency of use and negative consequences associated with use) over either the three months prior to incarceration, or 3 and 6 months following release. Participants were not randomly assigned to course participation. Rather, they were given the choice to participate in the course, with or without participating in the study, or to choose not to take the course and participate in the control condition of the study.

The behavioral changes in residents who took the course were apparent to their fellow jail mates, staff, and were reflected in data collected by the researchers. Although all residents were receiving some form of treatment, and appeared to improve in many areas, participants in the Vipassana course improved significantly more than controls across several domains. Three months following release from incarceration, the meditators, when compared with controls, were significantly higher in optimism and internal drinking-related locus of control, and significantly lower on measures of thought suppression, alcohol-related negative consequences, marijuana use, and both powder cocaine and crack cocaine use (Marlatt *et al.* 2004).

The effectiveness of Vipassana meditation on substance use might be due in part to its focus on both mind and body. One of the major emphases of Vipassana is observation of bodily sensations (*vedanā*). *Vedanā* is one of the four parts of the mind described by the Buddha in the Five Aggregates, his model of the human mind–body. *Vedanā* is also a category of observation in the Buddha's teaching of the Four Establishings of Mindfulness (in the Satipaṭṭhāna Sutta). The term "vipassana" is a synonym for any aspect of the Satipaṭṭhāna practices which are: the observation of (a) the body (*Kāyānupassanā*), (b) the sensations (*Vedanānupassanā*), (c) the mind (*Cittānupassanā*), and (d) mind-objects (*Dhammānupassanā*). Although simultaneous observation of body, sensations, mind, and mind-objects is going on in every practitioner of the observation of *vedanā*, a stronger focus is on the observation of sensations. Attention to physical sensations, for example, cravings, in addition to awareness of automatic processes and reactions of the mind, may help eliminate the roots of addiction. The Buddha taught that the deeper one goes with the practice, the closer one gets to freedom from craving: "What happiness is more spiritual than the spiritual? When the afflictions [based on craving] are destroyed, there arises a happiness more happy than the spiritual (SN.4.236–7, translation adapted from Bhikkhu Bodhi 2000)."

The Buddhist account of Vipassana's effects is compelling, and results of the study on Vipassana show encouraging support for this technique's effects on several important and difficult treatment domains. However, the Vipassana course

is not necessarily a feasible option for everyone in need of treatment. The course requires a ten-day residential commitment, and highly intensive training. Teachers of Vipassana are meditators themselves, and not necessarily psychologists. They must have years of their own meditation practice, and are specially appointed by Goenka. If the intention is to enhance existing treatments for addiction and design interventions that can be learned, disseminated and practiced by existing providers, the mechanisms at work need to be identified and integrated into a more practical structure.

## Mindfulness and addictive behaviors

Although the mechanisms that underlie the effectiveness of mindfulness meditation are uncertain, the increase in successful integration of Buddhist principles into psychological treatments is evident. The studies on MBSR and MBCT previously reviewed offer promising evidence for the contribution of mindfulness-based treatments aimed at chronic pain and other medical and psychological problems such as anxiety and depression. Mindfulness techniques have valuable elements to offer as part of a package of evidence-based psychotherapies for a number of mental disorders. Although some of these techniques, such as DBT and ACT, have been tested on substance-using samples, the techniques were not designed specifically for treatment of addictive behaviors.

The field of addictive behaviors is clearly in need of a mindfulness-based treatment designed specifically for problematic substance use. In order to develop MBRP, a conceptual framework specifying why mindfulness practice would improve standard RPT is essential. From that theoretical base, a treatment protocol can be developed combining what has proven effective in the past with RPT (Carroll 1996; Irwin *et al*. 1999) with elements of Buddhist psychology and mindfulness practice that currently show promise.

Breslin and his colleagues (2002) provide a useful framework for integrating mindfulness meditation into cognitively behavioral treatment for substance use, specifically for relapse prevention. In their analysis of relapse, these authors suggest that mindfulness practice has the potential to help clients prevent relapse through (1) facilitating recognition of affective and cognitive responses to triggers, thus interrupting automatic maladaptive responses that lead to relapse, and (2) promoting decrease in avoidance, and subsequent desensitization and increased tolerance of uncomfortable cognitive and affective states.

Negative affect has been shown to be one of the primary predictors of relapse (Cummings *et al*. 1980; Marlatt and Gordon 1985; Ludwig 1986). Because the immediate relief the individual experiences from the substance use is reinforcing, the behavior continues despite the delayed negative consequences. Over repeated use, negative affective states begin to elicit a conditioned response of craving. According to Breslin and his colleagues, techniques practiced in mindfulness meditation can help individuals to desensitize to triggers caused by negative affect, substituting a response of acceptance and equanimity.

Although substances are frequently used as a method of avoidance, there is often a paradoxical effect of attempting to suppress thoughts and feelings (e.g. Roemer and Borkovec 1993; Wegner and Zanekos 1994). Attempts to suppress or avoid experience can lead to further difficulty, including problematic substance use (Hayes *et al.* 1996). To explore the role of avoidance in negative affect and substance use, further analyses of the Marlatt and his colleagues' prison study explored mediating factors between meditation and substance use, examining the decrease immediately following the course in attempts to avoid unwanted thoughts.

Analyses suggested that the decrease in thought avoidance immediately following the course was related to decreases in alcohol, crack, and cocaine use at three-month follow-up (Bowen *et al.* 2004). Results also showed a corresponding decrease in negative affect at three months. These findings support the hypothesis that participants may have been using substances to avoid unwanted thoughts or negative affective states. Mindfulness meditation may have helped participants lessen their avoidance behavior, resulting in decreases in negative affect and substance use. This is in accord with previous findings suggesting that avoidant coping strategies and maladaptive ways of trying to regulate negative affect and stress are associated with relapse (Litman *et al.* 1983; Sanchez-Craig *et al.* 1984).

In addition to the awareness function of mindfulness, Breslin and his colleagues describe a desensitizing effect that could be potentially useful in working with substance use. Unlike response prevention, mindfulness practice teaches the meditator to be present with their experience, instead of reacting to it or avoiding it. Mindfulness can train people to have a new awareness of triggers for substance use. Subsequently, new behavioral responses to cues can also be learned, that is, observing, breathing and accepting, replacing the usual substance use behavior. This may, over time, serve to desensitize the individual to the negative states that often trigger use. The repeated experience of exposure to these cues coupled with non-reactivity can also increase one's sense of control and self-efficacy.

Regarding the integration of CBT and mindfulness techniques, Breslin and his colleagues discuss the similarity in the focus of the techniques on teaching clients to observe and increase awareness of thoughts and feelings. They are different, however, in that mindfulness encourages simply being aware of the "problems" or triggers, rather than trying to change or avoid them. Whereas CBT teaches strategies to inhibit or change thoughts that trigger craving and use, mindfulness practice teaches dispassionate observation of the thoughts and feelings. In this way, CBT focuses on modifying or eradicating thought content, whereas mindfulness practice teaches acceptance.

CBT offers useful strategies, such as avoidance of triggers. Through monitoring thoughts and feelings, CBT helps increase awareness of antecedents and consequences of using. The exercise of self-monitoring helps to interrupt the automatic processes that would usually be triggered in response to high-risk situations.

However, avoidance allows for the conditioned responses to these stimuli to remain unchanged, and thus remain in place should the trigger reappear. Mindfulness teaches tolerance to these triggers (leading to desensitization), rather than avoidance of them. Finally, clients are taught cognitive restructuring skills through which they examine, challenge, and change content of dysfunctional thoughts. In contrast, mindfulness focuses on the meditator's relationship to the thought, rather than trying to change the thought itself. CBT's strategies emphasize changing antecedents to thoughts, reactions to thoughts, and the content and meaning of thoughts themselves. For situations in which change is not feasible, mindfulness can add to this model, by providing alternate ways of relating to triggers.

## Developing a mindfulness-based relapse prevention program for addictive behaviors

Based on the previous theoretical and empirical support for effectiveness of mindfulness practices in the treatment of chronic pain (Kabat-Zinn) and chronic depression (Ma and Teasdale 2004; Segal *et al.* 2002), Witkiewitz, Marlatt, and Walker describe the development of an integrated treatment approach called Mindfulness-Based Relapse Prevention. The proposed treatment builds on Marlatt's relapse prevention model (Marlatt and Gordon 1985; Witkiewitz *et al.* in press). Similar to Segal's MBCT, with its focus on relapse prevention in depression, this technique combines RP, an empirically validated cognitive-behavioral technique, with mindfulness practices for treatment of substance use. The goal of MBRP is to enhance the skills repertoire of CBT by addition of mindfulness based skills by developing "awareness and acceptance of thoughts, feelings, and sensations through practicing mindfulness; and to utilize these mindfulness skills as effective coping strategies in the face of high risk situations" (Witkiewitz *et al.* in press).

Participants in MBRP are taught awareness of triggers and impulses, and acceptance of uncomfortable cognitive and affective states, especially negative affect. They learn to monitor their experiences as they are happening, thus desensitizing them to the urges previously experienced in similar situations. Repeated exposure to use of these techniques in high-risk situations reconditions impulses to escape or avoid through substance use, and will increase self-efficacy as they repeatedly and successfully use these skills.

The structure of the MBRP course is based on MBSR and MBCT. The course consists of eight weekly two-hour group sessions, with 12–14 participants who discuss relapse prevention, mindfulness, and the practice of the RP and mindfulness skills. Participants are assigned mindfulness exercises as homework, and daily practice of these skills are encouraged. Sessions begin with a brief mindfulness exercise. The course discussions include recognition of the tendency to be on "automatic pilot" (with a focus on learning to be more aware of each moment), the importance of mindfulness practices and barriers associated with practice, effects of craving and aversion on the mind, staying present during both

pleasant and unpleasant thoughts, mindfulness as a means of coping with craving and painful thoughts or sensations that precipitate relapse, and cultivating an attitude of acceptance. Skills are practiced using role-playing exercises and homework assignments. Clients are taught to focus attention on the breath and learn sitting meditations. Discussion and practice target craving and acceptance specifically related to substance use, and mindfulness as a coping skill to prevent relapse. Finally, clients will address maintaining lifestyle balance using meditation and mindfulness techniques.

MBRP aims to provide an opportunity for people with problematic substance use to form an association between mindfulness and relapse prevention skills. As in relapse prevention treatment, identifying high-risk situations for relapse is a central component of treatment. Clients are trained to develop a system for recognizing early warning signs for relapse and developing an increased awareness of triggers, such as people and places associated with substance use. The addition of mindfulness provides a new way of processing situational cues and monitoring one's reaction to the triggers happening around them.

## Perspectives on mindfulness-based RP mechanism of action

There are several theories on potential mechanisms of action in an integrated MBRP treatment. From a behavioral viewpoint, the cycle of addictive behaviors involves both positive and negative reinforcement. An addict is positively reinforced by the substance-induced high, and simultaneously negatively reinforced by the alleviation of craving or an uncomfortable physical or affective state. The addict is obsessed with a future "fix," either to escape a present, uncomfortable state, or to achieve a "high," which in a sense is an escape from the insipid, mundane present. Both of these states are future oriented, disallowing the addict to be present with the current experience of discomfort, and the fear of impermanence. Teaching these individuals to focus on the experience of here and now, observing and staying present in a non-judgmental way, counters this future-oriented mentality. Both increased awareness of triggers and cravings, and repeated exposure to uncomfortable states can help a user to change his or her habitual responses.

Mindfulness meditation teaches the observer to become aware of rising and passing thoughts and sensations, accepting them with awareness of their impermanence. They recognize that these events are not them, but merely experiences they are having, and it is the individual's choice whether or not to believe and follow them (Snelling 1991). Thich Nhat Hahn defines mindfulness as, "keeping one's consciousness alive to the present reality," thus replacing automatic processing with conscious, aware attention (Hahn 1976). Similarly, Groves and Farmer (1994) describe mindfulness as a means of becoming aware of triggers for craving, and choosing to do something other than use, thereby weakening a habitual response that is both positively and negatively reinforcing.

Mindfulness techniques encourage increased contact with internal experience that has previously been avoided, often through substance use. In working with addictions, the meditator learns to stay present with uncomfortable sensations, cravings, or urges to act on cravings. Instead of grasping for something to alleviate discomfort, the user allows the feelings to arise and take their course, with a mindful observation and understanding that they are not permanent states. Similar to exposure therapy, the repeated experience of contact with cravings or uncomfortable states can extinguish the previous set of responses, that is, substance use. This increased contact and acquisition of mindfulness-based skills introduces to the meditator a greater flexibility of responding (Hayes and Wilson 2003).

"Urge surfing," a technique described by Marlatt and Gordon (1985), teaches clients to visualize riding an urge or craving like a wave. The craving will start, and begin to grow in intensity. The addict will often feel as though the feeling will grow increasingly large, until it is unbearable, unless the client arrests it by giving in to the craving. Like a wave, however, urges swell to a peak, and then they subside; they are impermanent. Clients learn to stay with the wave, riding it, knowing that it will eventually wane.

Apart from similarity to behavioral aspects of treatment, Buddhism has a theoretical core that is antithetical, and therefore potentially curative, to an addicted lifestyle. A Buddhist approach encourages a way of living based on self-respect and self-fulfillment, not on desires. Buddhism also encourages a lifestyle that does not inflict harm on self or others, and that encourages love, compassion, and equanimity.

Pema Chodron, a renowned Buddhist teacher, emphasizes the element of *maitrī*, or loving kindness. Regarding addictive behavior, Chodron explains *maitrī* to be

> a basic feeling that we do not have to be afraid of what we are feeling right now, that we do not have to look for alternatives, that we aren't ashamed of what we are feeling in this moment . . . We can cut through the solidity of identity, can cut through the solidity of our sense of identity, can cut through the solidity of our sense of *problem* and can just let the problem go. We can cut through the strong sense of "I need this now," "I have to get something out of this," we can cut through that.
>
> (Chodron n.d.)

In these words is the sense of compassion that although implicit in many therapies, is not directly addressed by previous treatment models. While counselors are trained to be compassionate towards their suffering clients, the addict's self-compassion plays a crucial role in changing the downward spiral of addictive behaviors.

Mindfulness meditation involves continually bringing one's attention back to the present moment. Distracting thoughts and sensations arise, and it is the meditator's job to continually return his/her attention to the here and now. The process

of changing substance use can be viewed as a meditation, in which the user experiences cravings, urges, and even lapses. Instead of "one day at a time," mindfulness demands one moment at a time. In each moment, it is the user's job to observe urges and lapses that arise, to understand them not as failures but as part of the process of change, to realize their impermanence, and to bring attention back to the present, with an attitude of compassion and acceptance.

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# 20

# MINDFULNESS-BASED COGNITIVE THERAPY FOR DEPRESSION

*John D. Teasdale*

In this chapter I will describe how Mark Williams, Zindel Segal, and I developed a novel, theory-driven, psychological intervention to reduce relapse in recurrent major depression. The intervention, mindfulness-based cognitive therapy (MBCT) incorporates, as a central component, mindfulness training. We drew heavily on the mindfulness-based stress reduction (MBSR) program developed by Jon Kabat-Zinn and his colleagues at the University of Massachusetts Medical Center (Kabat-Zinn 1990). MBSR incorporates aspects of traditional Buddhist mindfulness meditation practices (e.g. Nyanoponika Thera 1962) into a highly structured eight-week program. The MBSR program was designed to be accessible to patients in a general hospital setting who had no previous interest or experience in meditation, and who were suffering a range of medical disorders.

By way of background, I will first outline why there is a pressing need for approaches which can offer cheap and effective ways to reduce risk of relapse and recurrence in major depression. I will then describe the ways in which we responded to that need, and the thinking that led us to see an integration of mindfulness training and aspects of cognitive therapy as a central component of our response. After describing the MBCT program, I will report the results of two clinical trials that we conducted to evaluate its effectiveness in samples totaling more than 200 recurrently depressed patients. The results of these trials indicate that the strategy of integrating aspects of mindfulness training and aspects of cognitive therapy can lead to effective interventions, and suggest that this strategy may be worth exploring more generally.

## Background – the world-wide health burden of depression

The World Health Organisation (WHO) estimates that, by the year 2020, unipolar major depression will be the disease imposing the second greatest burden of ill health worldwide (Murray and Lopez 1996), very close behind the top cause,

ischaemic heart disease. A major reason for the scale of this burden is that, as well as being a condition with a high rate of incidence, it is most often a condition characterized by relapse, recurrence, or chronicity: "it has been established that unipolar major depressive disorder is a chronic, lifelong illness, the risk for repeated episodes exceeds 80%, patients will experience an average of four lifetime major depressive episodes of 20 weeks duration each" (Judd 1997: 990).

Such data suggest that the prevention of relapse and recurrence poses a central challenge in the overall management of major depressive disorder. Currently, maintenance pharmacotherapy is the best validated and most widely used approach to prophylaxis in depression (e.g. Kupfer *et al.* 1992). In this approach, patients who have recovered following treatment of their acute episode by antidepressant medication continue to take this medication as a way to reduce risk of further episodes.

The protection from maintenance pharmacotherapy lasts only as long as patients continue to take their antidepressant medication. By contrast, it appears that a psychological treatment, cognitive behavior therapy (CBT) for depression (Beck *et al.* 1979), administered during depressive episodes, is effective in reducing subsequent rates of relapse and recurrence after treatment has been completed. Studies comparing the long-term outcome of patients who recovered following treatment of acute depression by CBT with the outcome of patients who recovered following treatment with antidepressant medication and were then withdrawn from medication, consistently find less relapse or need for further treatment in the CBT group (Blackburn *et al.* 1986; Simons *et al.* 1986; Evans *et al.* 1992; Shea *et al.* 1992). Such findings suggest that CBT may be a treatment for acute depression that has longer term effects in reducing risk of future relapse and recurrence, presumably through patients acquiring skills, or changes in thinking, that confer some degree of protection against future onsets.

## The challenge

The demonstrated effectiveness of maintenance pharmacotherapy and CBT as ways to reduce relapse and recurrence is clearly good news. However, both these approaches have disadvantages. Maintenance pharmacotherapy requires patients to continue to take antidepressant medication for extended periods, if not indefinitely. CBT is dependent on scarce, expensive, skilled professional personnel, so that, given the extremely high prevalence of depression, it is unlikely, when given in its usual one-on-one therapy format, to make much impact on the total burden caused by this condition.

In this situation, an attractive alternative strategy would be to combine pharmacotherapy for the acute episode of depression with psychological preventive interventions administered following recovery. This strategy offers the possibility of (a) capitalizing on the cost-efficiency of antidepressant medication to reduce acute symptoms; while, (b) avoiding the need for patients to remain indefinitely on maintenance medication to reduce future relapse and recurrence.

To use this strategy we need a cost-efficient psychological intervention that can be administered to depressed patients after they have recovered from their worst symptoms, and that will reduce subsequent risk for relapse or recurrence of depression. Development of such an intervention was the challenge that Mark Williams, Zindel Segal, and I decided to accept, some years ago, as the goal of our collaborative efforts.

## Responding to the challenge

Our aim was to develop an intervention that would achieve similar relapse prevention effects to CBT for depression but that, unlike conventional CBT, could be administered to patients who had already recovered following treatment by antidepressant medication. It was also important that the intervention should be more cost-efficient than standard individual CBT.

We decided to go back to basics for a rethink of what was actually required of such a program, rather than to explore variants on the theme of standard CBT for depression. We sought guidance from our attempts to answer two central questions: (1) What is the cognitive basis of the increased vulnerability to relapse and recurrence shown by patients who have previously experienced episodes of major depression? (2) How does cognitive therapy reduce this vulnerability?

## Cognitive vulnerability to relapse and recurrence

Those who have previously experienced episodes of major depression are at substantially greater risk of onset of episodes of major depression than those without such experience (Judd 1997). What is the cognitive basis of this increased vulnerability in these patients?

Our approach to understanding cognitive vulnerability to depression emerged from studies demonstrating negative biases in memory and other cognitive functions in experimentally induced depressed moods (Teasdale 1983, 1988; and also see Persons and Miranda 1992). This hypothesis suggested that vulnerability to relapse and recurrence of depression reflects the fact that individuals who have recovered from major depression differ from individuals who have never experienced major depression in the patterns of thinking activated by unhappy moods.

Specifically, it is suggested that, in recovered depressed patients, the thinking activated by mild depressed moods will show similarities to the patterns of negative thinking that were previously present during episodes of depression. These patterns commonly involve views of the self as worthless and useless, and of the future as hopeless, and are assumed to contribute to the persistence of the episode of depression. Reactivation of these patterns in recovered patients by mild depressed moods would act to maintain and intensify the negative mood

through escalating and self-perpetuating cycles of ruminative cognitive-affective processing (Teasdale 1988, 1997). In this way, in those with a history of major depression, states of mild depressed moods will be more likely to progress to more intense and persistent states, so increasing risk of further onsets of episodes of major depression.

Studies that have compared the patterns of thinking activated by mild depressed mood in those with and without a history of major depression support this account; those with a history of depression typically show greater activation of globally negative views of the self and of dependence of perceived self-worth on the approval of others or the outcome of tasks (Ingram *et al.* 1998). This analysis provides a parallel explanation, at the cognitive level, to more biological accounts of episode sensitization and kindling in recurrent affective disorder (Post 1992; Segal *et al.* 1996). Accounts at both biological and cognitive levels are consistent with the finding that, with repeated experiences of episodes of major depression, less environmental stress is required to provoke relapse/recurrence (Post 1992). This can be seen as a consequence of the repeated associations between depressed mood and patterns of negative, self-devaluative, hopeless thinking during each episode of major depression. As a result of these associations, links become forged between depressed mood and these negative thinking patterns, and the strength of these links increases with every successive episode. It follows that the ease with which mild depressed moods can trigger these self-perpetuating thinking patterns will increase following each episode. That is, the processes mediating relapse/recurrence appear to become progressively more autonomous with increasing experience of episodes of depression.

Figure 20.1 summarizes the earlier account of relapse and recurrence and indicates where the effects of preventive interventions are likely to operate.

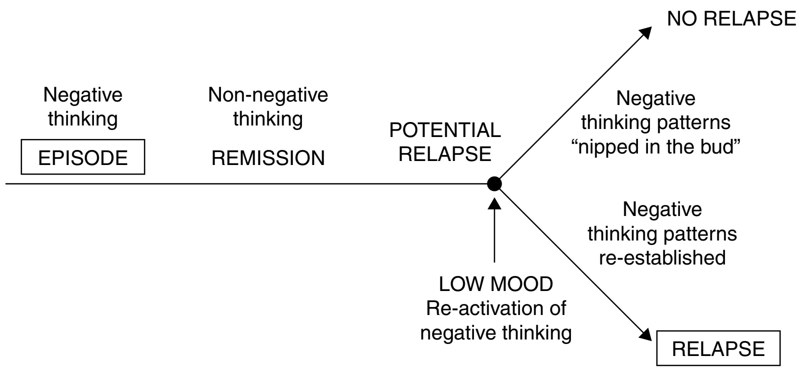



*Figure 20.1* The conceptual model underlying the development of MBCT for prevention in recurrent major depression.

## What is reactivated?

The analysis summarized in Figure 20.1 suggests that the task of relapse prevention is to preempt the establishment of self-perpetuating and self-escalating patterns of negative thinking in states of mild depressed mood, or at other times of potential relapse. In order to design interventions to achieve this aim, it would be very helpful if we could have a clear understanding of the negative thinking that, according to the earlier analysis, is reactivated.

Our best hypothesis is that it is actually a whole, integrated configuration of information processing, or "mind" (Teasdale 1997) that gets "wheeled in" in states of mild depressed mood in depression-prone individuals. This configuration is characterized by ruminative thought patterns revolving around a globally negative view of self, reinforced by feedback loops involving the effects of depression on the body (Teasdale *et al.* 1995). The configuration is motivated to the goal of reducing depression, but the method used to achieve that aim turns out to be tragically counterproductive. Repeatedly "thinking about" depression, negative aspects of the self, or of the situation one is in, is intended to lead to insights that will allow the individual to resolve the situation and escape the state of depression. In fact, in this configuration, continually ruminatively dwelling on negative self-related information serves only to perpetuate, rather than resolve, depression. Effectively, old, habitual patterns of goal-related cognitive processing get switched in relatively automatically, and thinking runs repeatedly around fairly well-worn "mental grooves" without finding an effective way forward out of depression.

Consistent with this hypothesis, Nolen-Hoeksema and colleagues have consistently demonstrated that a ruminative style of responding to mild states of depression acts to maintain depressed moods (Nolen-Hoeksema 1991), and a negative self-focus is characteristic of depression (Pyszczynski and Greenberg 1987).

In the next section, I consider the implications of this analysis for the design of novel interventions to prevent relapse and recurrence in depression. First, let us consider how cognitive therapy is effective in achieving such prevention.

## How does cognitive therapy reduce relapse and recurrence of depression?

The original cognitive model underlying CBT for depression suggested that vulnerability to depression was related to certain underlying dysfunctional attitudes or assumptions related to self-worth. From this perspective, reduction in risk of relapse following CBT would be the result of specific effects of CBT reducing those dysfunctional attitudes. This hypothesis has received little empirical support (Barber and DeRubeis 1989); in studies where CBT has produced significantly better long-term outcomes than pharmacotherapy, the two treatments often do not differ on post-treatment measures of dysfunctional attitudes (e.g. Simons *et al.* 1984).

What then are the cognitive processes through which CBT reduces relapse and recurrence in depression? At the time that Zindel Segal, Mark Williams, and I considered this central question, it was generally assumed that CBT, which is

primarily targeted on changing belief in depressive thoughts and dysfunctional attitudes, had its effects through changes in belief in the *content* of depressive thinking. We came up with an interestingly different alternative possibility. We realized that, although the explicit emphasis in CBT is on changing belief in thought *content*, both our theoretical analysis and our clinical experience of using CBT suggested, as a factor of equal or greater importance, that when this treatment was successful it led implicitly to changes in patients' *relationships* to their negative thoughts and feelings. Specifically, as a result of repeatedly identifying negative thoughts as they arose and standing back from them to evaluate the accuracy or adaptiveness of their content, patients often made a general shift in their perspective on negative thoughts and feelings. Rather than regarding thoughts as necessarily true or as an aspect of the self, patients switched to a perspective within which negative thoughts and feelings could be seen as passing events in the mind that were not necessarily valid reflections of reality nor central aspects of the self. The importance of such "distancing" or "decentring" had previously been recognized in discussions of cognitive therapy (e.g. Beck *et al.* 1979), but usually as a means to the end of changing thought content, rather than an end in itself.

The attraction of our alternative perspective on the way that cognitive therapy might have its effects was that it gave us the freedom to consider alternative approaches that, while fostering a shift in relationship to negative thoughts and feelings, might, unlike cognitive therapy, have no elements explicitly directed at changing thought content. Mindfulness training was one such approach.

## Mindfulness training as a way to prevent relapse and recurrence in depression?

> Mindfulness means paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.
>
> (Kabat-Zinn 1994: 4)

How did our consideration of the nature of cognitive vulnerability to relapse and of the way that cognitive therapy might modify that vulnerability lead us to explore mindfulness training as a possible intervention to reduce relapse and recurrence in depression?

We were aware that Marsha Linehan had successfully used mindfulness training as a component of her CBT approach to borderline personality disorder (Linehan 1993), and that Jon Kabat-Zinn and his colleagues at the University of Massachusetts Medical Center (UMASS) had developed MBSR (Kabat-Zinn 1990), relevant to a wide range of clinical conditions. As discussed in more detail elsewhere (Teasdale *et al.* 1995; Teasdale 1999), the following considerations led us to believe that mindfulness training might also be highly relevant to the prevention of relapse in depression.

Detailed analyses of the patterns of negative thinking reactivated in depressed mood in recovered depressed patients (Teasdale and Barnard 1993;

Teasdale *et al.* 1995) suggested that the processing configurations involved, while "automatic" in the sense that they involved well-practiced habitual cognitive routines, were highly dependent on central controlled processing attentional resources. Such resources are limited, so that there is competition for them between different tasks that depend on them, and hence mutual interference between those tasks. It follows that an important requirement of a relapse prevention intervention is that it should make demands on these limited attentional resources in such a way that fewer of those resources are available for the establishment and maintenance of the depression-related processing configurations reactivated in dysphoria; "starved" of necessary resources in this way, such configurations are less likely to be established. It is widely assumed (e.g. Norman and Shallice 1986) that conscious awareness of task stimuli is a marker that controlled processing attentional resources are being deployed to the processing of those stimuli, and that intentional action is also dependent on such limited resources. It follows that the intentional deployment of conscious awareness, which is a defining characteristic of mindfulness, will require limited attentional resources and reduce their availability for the processing configurations that might otherwise support the relapse process.

We believed that cognitive therapy achieved at least some of its relapse prevention effects through changing patients' relationship to their depressive thoughts and feelings, in particular, through fostering a "decentered" relationship to such mental contents. Such a shift is a key outcome of mindfulness training, as indicated by the following quotation from Jon Kabat-Zinn's description of the MBSR program:

> It is remarkable how liberating it feels to be able to see that your thoughts are just thoughts and that they are not "you" or "reality"... the simple act of recognizing your thoughts *as thoughts* can free you from the distorted reality they often create and allow for more clear-sightedness and a greater sense of manageability in your life.
>
> (Kabat-Zinn 1990: 69–70)

Such observations suggested that mindfulness training might be an alternative route to achieve the decentring effect that we considered to be such an important aspect of the relapse prevention effects of cognitive therapy.

Relapse-related ruminative processing routines involve a particular "cognitive mode" of processing depression-related material, characterized by a focus at a relatively conceptual level ("thinking about") on the topic of discrepancies between present and desired states of self and world with a view to identifying actions to achieve the goal of reducing those discrepancies (Pyszczynski and Greenberg 1987; Teasdale and Barnard 1993; Teasdale 1999). This goal-dominated mode might be described as "doing." The suggestion here is that the relapse-engendering process is not simply dependent on the processing of particular types of depression-related material; rather, it is the processing of that material within

a particular cognitive mode. In other words, it is not just *what* is processed that determines whether relapse ensues, but *how* that material is processed. From this perspective, an attractive strategy to preempt the establishment of relapse-related processing would be to establish a cognitive mode different from that of the relapse-engendering processing configuration, and to process depression-related and other material within that alternative cognitive mode.

Mindfulness can be seen as just such an alternative cognitive mode (Teasdale 1999), in which the focus of processing is at a level of representation that is not conceptual, the processing is not dominated by the need to attain goals, and in which goal-related discrepancies are not the prime topic of processing. Traditionally, this aspect of mindfulness is described as "being" rather than "doing" (Kabat-Zinn 1990). Conceptualizing mindfulness as an alternative cognitive mode, incompatible with the mode that characterizes the relapse-engendering processing configuration, reinforced the attraction of mindfulness training as a route to relapse prevention.

Finally, and straightforwardly, the emphasis within mindfulness training on being fully present and attentive to the content of moment-by-moment experience, whether it is pleasant, unpleasant, or neither pleasant nor unpleasant, is of obvious relevance to the cognitive avoidance which often seems an important contributor to relapse. Given the extremely unpleasant nature of the experience of depression, it is understandable that recovered patients might redirect their attention away from the early signs and symptoms of incipient relapse. Unfortunately, this means that they may not take adaptive action to deal skillfully with the possibility of relapse at a very early stage when relatively simple interventions may be quite successful. Rather, by deferring action until the relapse process has gained further momentum and forces itself into attention, patients are presenting themselves with a much more difficult situation to deal with constructively. Training in mindful awareness of bodily sensations, feelings and thoughts, in particular emphasizing the importance of deliberately turning towards unpleasant experiences with an attitude of openness and acceptance, would clearly increase the chance of detecting difficulties early and responding more skillfully and effectively.

In summary, the analysis summarized in Figure 20.1 suggested that risk of relapse and recurrence would be reduced if patients who have recovered from episodes of major depression could learn, first, to be more aware of negative thoughts and feelings at times of potential relapse/recurrence, and, second, to respond to those thoughts and feelings in ways that allowed them to disengage from ruminative depressive processing (Nolen-Hoeksema 1991). It appeared that mindfulness training had much to offer with respect to both of these goals.

## Mindfulness-based cognitive therapy (MBCT)

The preventive intervention that Mark Williams, Zindel Segal, and I eventually developed, MBCT (also previously known as attentional control (mindfulness)

training), is based on an integration of aspects of CBT for depression (Beck *et al.* 1979) with components of MBSR developed by Kabat-Zinn and colleagues (Kabat-Zinn 1990). Unlike CBT, there is little emphasis in MBCT on changing belief in the *content* of thoughts; rather, the emphasis is on changing *awareness of* and *relationship to* thoughts, emotional feelings, and physical sensations experienced in the body. Aspects of CBT included in MBCT are primarily those designed to facilitate "decentered" views such as "Thoughts are not facts" and "I am not my thoughts." Unlike MBSR, which is a generic program applicable to a wide range of problems, MBCT is specifically designed to achieve a particular goal for patients with a specific clinical problem; the prevention of future episodes of depression in recurrently depressed patients currently in recovery. This degree of specificity allows MBCT, like CBT, to customize aspects of the program toward the details of a particular clinical problem, for example, decentring can be facilitated specifically for negative depressive thoughts by providing participants, as a group, with a list of the most frequently observed negative automatic thoughts, and allowing them to recognize that their own personal "top ten" negative thoughts are actually very similar to those of other group members and to the findings reported by systematic research.

MBCT is designed to teach patients in remission from recurrent major depression to become more aware of, and to relate differently to, their thoughts, emotional feelings, and bodily sensations, for example, relating to thoughts and feelings as passing events in the mind, rather than identifying with them or treating them as necessarily accurate read-outs on reality. The program teaches skills that allow individuals to disengage from habitual ("automatic") dysfunctional cognitive routines, in particular depression-related ruminative thought patterns, as a way to reduce future risk of relapse and recurrence of depression.

Because, unlike CBT, there is little explicit emphasis in MBCT on changing belief in the content or specific meanings of negative automatic thoughts. In MBCT training can occur in the remitted state, using everyday experience as the object of training.

## The MBCT program

MBCT is a manualized group skills training program (Segal *et al.* 2002) that draws heavily on the MBSR program developed by Kabat-Zinn and colleagues (Kabat-Zinn 1990), and integrates it with compatible elements of CBT for depression (Beck *et al.* 1979). After an initial individual orientation session, the MBCT program is delivered by an instructor in eight weekly two-hour group training sessions involving up to 12 recovered recurrently depressed patients. During that period, the program includes daily homework exercises. Homework invariably includes some form of guided (taped) or unguided awareness exercises, directed at increasing moment-by-moment non-judgmental awareness of bodily sensations, thoughts and feelings, together with exercises designed to integrate application of awareness skills into daily life. Key themes of the program include empowerment

of participants and a focus on awareness of experience in the moment. Participants are helped to cultivate an open and acceptant mode of response, in which they intentionally face and approach difficulties and discomfort, rather than automatically try to get rid of or avoid them, and in which they develop a "decentered" perspective on thoughts and feelings, so that these can be viewed as passing events in the mind.

A core feature of the program involves facilitation of an aware mode of being, which is not dominated by the need to attain goals, and is characterized by a sense of freedom and choice, in contrast to a mode dominated by habitual, goal-dominated "automatic" patterns of cognitive-affective processing. For patients, this distinction is often illustrated by reference to the common experience, when driving on a familiar route, of suddenly realizing that one has been driving for miles "on automatic pilot," unaware of the road or other vehicles, preoccupied with planning future activities or ruminating on a current concern. By contrast "mindful" driving is associated with being fully present in each moment, consciously aware of sights, sounds, thoughts and body sensations as they arise. When mindful, the mind responds afresh to the unique pattern of experience in each moment, rather than reacting "mindlessly" to fragments of a total experience with old, relatively stereotyped, habitual patterns of mind. Increased mindfulness allows early detection of relapse-related patterns of negative thinking, feelings, and body sensations, so allowing them to be "nipped in the bud" at a stage when this may be much easier than if such warning signs are not noticed or are ignored. Further, entering a mindful mode of processing at such times allows disengagement from the relatively "automatic" ruminative thought patterns that would otherwise fuel the relapse process. Formulation of specific relapse/recurrence prevention strategies (such as involving family members in an "early warning" system, keeping written suggestions to engage in activities that are helpful in interrupting relapse-engendering processes, or to look out for habitual negative thoughts) are also included in the later stages of the initial seven-week phase.

Following the initial phase of eight weekly group meetings, follow-up meetings are scheduled at intervals.

## Evaluating MBCT

Having developed a new cost-efficient intervention to reduce relapse and recurrence in depression, Zindel Segal, Mark Williams, and I went on to see whether, in fact, MBCT achieved the aims it was designed to achieve. To do this we conducted an initial clinical trial systematically evaluating the effects of the MBCT program on the subsequent experiences of major depression of a group of recurrently depressed patients, currently in recovery.

At the time we planned the trial, there was no published evidence that any psychological intervention, initially administered in the recovered state, could reduce risk of future recurrence in major depression. Given this situation, the first priority was to evaluate whether MBCT was of *any* benefit in reducing

relapse/recurrence; if benefits were observed, subsequent research could compare MBCT with other psychological interventions, including controls for attention-placebo factors, and with alternative approaches to prevention, such as maintenance pharmacotherapy.

We used a simple additive design in which patients who continued with treatment-as-usual (TAU) were compared with patients who, additionally, received training in MBCT. Such a design does not aim to compare MBCT with the best available alternative preventive intervention. Nor does it allow any reduction in rates of relapse and recurrence for patients receiving MBCT to be attributed unambiguously to the specific components of MBCT, rather than to non-specific factors, such as therapeutic attention or group participation. However, this design is the most appropriate to answer the question that was of primary interest to us: does MBCT, when offered in addition to TAU, reduce rates of relapse and recurrence compared to TAU alone?

## The first trial

In our three-centre clinical trial evaluating the efficacy of MBCT (reported in detail in Teasdale *et al.* 2000), 145 patients, currently in remission or recovery from major depression, were randomly allocated either to continue with TAU, or, additionally, to receive MBCT. To enter the trial, patients had to have experienced at least two previous episodes of major depression (in fact 77% had experienced three or more). All patients had previously been treated with antidepressant medication but had been well and off medication for at least three months before entering the trial.

After baseline assessments and allocation to treatment condition, patients entered an initial seven-week treatment phase, after which they were followed up for a year. The primary outcome variable we were interested in was whether and when patients experienced relapse or recurrence meeting DSM-IIIR criteria for major depressive episode (American Psychiatric Association 1987), as assessed by the Structured Clinical Interview for Diagnosis (SCID), Spitzer *et al.* (1992) administered at bimonthly assessments throughout the trial.

In clinical trials such as we conducted it is conventional, prior to randomization, to stratify the sample on baseline variables that might be predictive of the primary clinical outcome of interest. In our case, we stratified on how recently the last episode of depression had occurred, and how many previous episodes of major depression patients had experienced (two versus three or more). It is also conventional, before conducting the main statistical analyses of such a trial, to check that the effects of the treatments being compared were the same in patients in the different strata.

When we did this, we found that the difference in relapse rates between MBCT and TAU in patients with three or more previous episodes of depression was, itself, statistically significantly different from the difference between these conditions in patients with only two previous episodes of depression, that is, MBCT

was differentially effective in these two groups of patients. In patients with three or more episodes (who comprised 77% of the total sample), MBCT significantly ($p < 0.005$) reduced relapse compared to TAU; in patients with only two episodes (who comprised 23% of the total sample), there was no significant difference in relapse rates between patients receiving MBCT and TAU. That is, beneficial effects of treatment were restricted to the patients with more extensive histories of depression. We consider possible explanations for this interesting finding in the next section. For now, let us focus on the patients with three or more episodes, who were considerably in the majority in the sample we studied.

Of these patients, those who simply continued with the treatment that they would normally receive (the TAU group) showed a 66% relapse rate over the total 60-week study period, whereas those who received a “minimum effective dose” of MBCT (at least four of the eight weekly MBCT sessions) showed a relapse rate of 37%. The difference in relapse rates between TAU and MBCT remained statistically significant when all those allocated to the MBCT condition were considered (irrespective of whether or not they received a “minimally adequate dose” of MBCT); for this sample, the relapse rate was 40%. The benefits of MBCT could not be accounted for by greater use of antidepressants by patients in the MBCT group; the proportion of patients using antidepressants at any time during the study period was actually less in MBCT than in TAU.

In TAU patients, risk of relapse and recurrence over the study period increased in a statistically significant linear relationship with number of previous episodes of depression: 2 episodes, 31% relapse/recurrence; 3 episodes, 56% relapse/recurrence; and 4 or more episodes 72% relapse/recurrence. In the group receiving a minimally adequate dose of MBCT, there was no significant relationship between number of previous episodes and risk of relapse/recurrence: 54% relapsed in the 2 episodes group; 37% relapsed in the >2 episodes group. That is, the effect of MBCT appeared to be to eliminate the increased risk of relapse in those with three or more previous episodes of depression.

The most important finding of this trial was that, in participants with three or more previous episodes of depression (who comprised 77% of the sample), an “adequate dose” of MBCT almost halved relapse/recurrence rates over the follow-up period, compared to TAU. Because the patients were seen in groups, this benefit was achieved for an average investment of less than five hours of health professional time per patient, making MBCT, as intended, a cost-efficient approach to prevention of depression.

It is important to note that MBCT was specifically designed for remitted patients and is unlikely to be effective in the treatment of acute depression, where factors such as difficulties in concentration and the intensity of negative thinking may preclude acquisition of the attentional control skills central to the program.

The finding that MBCT prevented relapse and recurrence in patients with a history of three or more episodes of depression, but not in patients with only two previous episodes, is of particular interest with respect to the theoretical background to MBCT (Teasdale *et al.* 1995; Segal *et al.* 1996). This program was

specifically designed to reduce the contribution of patterns of depressive thinking reactivated by dysphoria to the processes mediating relapse and recurrence. Such dysphoria-linked thinking, it was assumed, resulted from repeated associations between the depressed state and characteristic negative thinking patterns, within each depressive episode. The strengthening of these associations with repeated episodes was assumed to contribute to the increased risk of subsequent episodes following each episode experienced. In particular, it was assumed that negative thinking reactivated by dysphoria contributed to the increasingly autonomous nature of the relapse/recurrence process with multiple episodes, reflected in the observation that environmental provoking events appear to play a progressively less important role in onset with increasing number of episodes (Post 1992).

The earlier account suggests the possibility that, in this initial trial, (a) the greater risk of relapse/recurrence in those with three or more episodes than in those with only two episodes (apparent in the TAU group), was to a large extent attributable to autonomous relapse/recurrence processes involving reactivation of depressogenic thinking patterns by dysphoria, and (b) the prophylactic effects of MBCT arose, specifically, from disruption of those processes at times of potential relapse/recurrence. Consistent with this analysis, MBCT appeared to have no prophylactic effects in those with only two previous episodes, and the rate to which relapse/recurrence was reduced by adequate MBCT in those with three and more episodes (37%) was similar to the rate of elapse/recurrence in those with only two episodes receiving TAU (31%).

Alternatively, it is possible that the differences in response to MBCT of patients with three or more versus only two previous episodes were not solely the result of differences in previous experience of depression, but also reflected the fact that they came from different base populations, with distinct psychopathologies. In this case, in this trial, number of previous episodes might have been a marker of particular psychopathologies, rather than (or as well as) the cause of the observed differential response to MBCT. Consistent with this possibility, patients with only two previous episodes were significantly older when they experienced their first episode of depression than individuals with three or more episodes.

## The second trial (Ma and Teasdale 2004)

A second trial was conducted to address a number of issues raised by the first trial. The same basic design was employed, but this time all 75 patients were recruited at one treatment site. A primary aim of this trial was to see whether the relapse prevention effects of MBCT observed by Teasdale *et al.* (2000) for patients with three or more previous episodes of depression (who again made up three quarters of the total sample) could be replicated. The new results showed that they could; again, MBCT significantly ($p = 0.001$) halved relapse/recurrence rates compared with TAU (36% versus 78%), this time for the investment of less than three hours instructor time per patient, on average. (The reduction in average instructor time from the first trial reflected a reduction in the number of follow-up

sessions, and the fact that the initial induction interview was combined with the initial assessment interview). MBCT does, indeed, appear to offer a cost-efficient and efficacious approach to prevention in this group of patients.

A second aim was to see whether further evidence could be obtained of differential response to MBCT in a group of patients with three or more episodes versus a group with only two (recent) episodes. Again, the earlier findings were replicated; the difference in relapse/recurrence rates between MBCT (50%) and TAU (20%) in patients with just two episodes was significantly different from, and in the opposite direction to, the difference in relapse rates between MBCT and TAU in patients with three or more episodes. As in the first trial, the difference in relapse/recurrence rates between MBCT and TAU in patients with two episodes was itself, non-significant.

A third aim was to test the hypothesis that MBCT is specifically effective in preventing relapses mediated by autonomous, internal processes (such as reactivation of patterns of negative ruminative thinking by dysphoria) rather than relapses provoked by severely stressful life events, and that this can account for its ineffectiveness in the group of patients with only two previous episodes. Consistent with this view, in patients with three or more episodes, the difference in the percentage of patients relapsing in the TAU and MBCT groups was greatest in relapses occurring in the absence of any obvious provoking life events (TAU 26%, MBCT 4%), and least in relapses associated with severe life events, where there was actually no difference (7% versus 7%). Further, this differential effectiveness of MBCT for different types of relapse could account for the failure of MBCT to benefit patients with only two episodes. In contrast to patients with three or more episodes, nearly all the relapses in patients with only two episodes were associated with severe life events, and these were just the kind of relapses that, within the three or more episode group, MBCT was ineffective at reducing.

A final aim of the second trial was to seek evidence to clarify whether, using our selection criteria and recruitment procedures, the patients recruited with only two episodes were (1) from the same base population as those recruited with three or more episodes, and simply at an earlier point in their depressive career, or (2) whether these two groups actually represented distinct populations with different psychopathologies. As in the first trial, patients with three or more episodes were found to have an earlier onset of first depression than patients with only two episodes. They also reported more adverse childhood experience. Both differences support the hypothesis that, in the context of the selection criteria used in these trials, patients with three or more episodes and patients with two episodes came originally from distinct populations.

Together, these two trials suggest that MBCT is a cost-efficient and efficacious intervention to reduce relapse/recurrence in patients with recurrent major depressive disorder who, following a reportedly adverse childhood, have experienced three or more previous episodes of depression, the first of which was relatively early in their lives. MBCT appears to be most effective in preventing relapse/recurrence that is unrelated to environmental provocation. This finding is

consistent with MBCT having its effects, as intended, through the disruption of autonomous, relapse-related cognitive-affective ruminative processes reactivated by dysphoria at times of potential relapse. The apparent failure of MBCT to prevent relapse in the particular group of patients with only two previous episodes that were studied in these trials appears to reflect the fact that these patients originated from a different base population, with normal reported childhood experience, later initial onset of major depression, and relapse/recurrence predominantly associated with major life events. MBCT appears to be contra-indicated for this group.

## Conclusions

Our theoretical analyses of the processes mediating the onset of depressive episodes in patients with recurrent major depression, and of the processes through which CBT reduced depressive relapse and recurrence led us to design MBCT. This program draws heavily on MBSR, as developed by Jon Kabat-Zinn and his colleagues, and integrates it with aspects of CBT for depression. The results of our trials suggest that this integration yielded a cost-efficient preventative program that can be effective in substantially reducing risk of relapse and recurrence in patients with three or more previous episodes of depression.

To our knowledge, the results of our initial trial provided the first demonstration that a group-based psychological intervention, initially administered in the recovered state, can significantly reduce risk of future relapse/recurrence in patients with recurrent major depression. To our knowledge, this was also the first multi-center randomized clinical trial evaluating a mindfulness-based clinical intervention.

In developing MBCT, the generic MBSR program was modified to increase its relevance to the particular target of preventing relapse and recurrence in major depression. Taken with the results from smaller, or less controlled, evaluations suggesting the effectiveness of the generic MBSR program in treating a range of disorders (reviewed by Baer 2003), the effectiveness of MBCT suggests that mindfulness-based clinical interventions may hold considerable therapeutic promise, either alone, or in combination with other forms of intervention. In particular, CBT and mindfulness-based approaches offer complementary, and therefore potentially synergistic, approaches to emotional disorders, suggesting that the general strategy of combining them may be relevant to a wider range of problems, beyond relapse prevention in recurrent depression.

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21

# THE PSYCHOLOGICAL PROCESSES UNDERLYING MINDFULNESS

## Exploring the link between Buddhism and modern contextual behavioral psychology

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The purpose of this chapter is to describe recent developments in behavior therapy and to link these developments to the topic of mindfulness. The particular focus is on Acceptance and Commitment Therapy (ACT, said as one word, not initials; Hayes *et al*. 1999; Hayes 2002) and the contextual behavioral theory that underlies it. These perspectives belong to the present volume, not so much because they draw their technology or theory from Buddhism as because there seems to be notable similarities between these approaches drawn from Western psychological science and major Buddhist principles (Hayes 2002). As such the emphasis will be on our area of expertise, psychological theory and technology, not Buddhist scholarship per se. We will orient the reader to what seems to us to be interesting and rather surprising areas of overlap between these two traditions, but we recognize that more sophisticated analyses would be possible from a Buddhist perspective. Hopefully, in this chapter we will provide enough information for readers to make additional connections of that kind.

Behavior therapy (referring in this chapter to the entire range from clinical behavior analysis to cognitive therapy) can be roughly categorized into three waves (Hayes 2004). The first wave of traditional behavior therapy focused on overt behaviors and their relationships with environmental events. Antecedent and consequent events were manipulated to attempt to alter the form, frequency, and situational sensitivity of overt problem behaviors or missing skills. The second wave of traditional cognitive behavioral therapy (CBT) was driven by the idea that thoughts should have a more central role in the analysis and treatment of diverse behavioral problems. Like the first wave, however, the approach was first order. Negatively evaluated cognitions were identified and directly challenged. For

example, clients learn to detect irrational cognitions and dispute them, to notice cognitive errors and logically correct them, to extract core beliefs and conduct behavioral experiments to evaluate their validity.

More recently, a third wave has arisen that uses concepts such as acceptance, mindfulness, defusion, emotional deepening, contact with the present moment, relationship, values, dialectics, and the like. Examples include Acceptance and Commitment Therapy, Dialectical Behavior Therapy (DBT) (Linehan 1993a; Robins 2002), Integrative Behavioral Couple Therapy (IBCT) (Jacobson and Christensen 1996), and Mindfulness Based Cognitive Therapy (MBCT) (Segal *et al.* 2002), among several others (Borkovec and Roemer 1994; McCullough 2000; Marlatt 2002; Martell *et al.* 2001; Roemer and Orsillo 2002). Like traditional CBT, third wave therapies acknowledge the centrality of private experiences on psychological well-being (Hayes and Wilson 1995; Wilson *et al.* 1997). However, rather than being primarily focused on the form or frequency of particular private events these therapies attempt to alter their function. More contextual in its philosophical approach and more focused on experience than on logical argument, the third wave of behavior therapy draws broadly upon methods and techniques from Eastern approaches. In doing so, these methods are fundamentally altering the nature of empirical clinical psychology itself.

It is helpful to briefly examine several of these new methods so that the underlying theme that unites them will be more evident. MBCT (Segal *et al.* 2002; Teasdale *et al.* 1995) uses mindfulness to assist clients in becoming more aware of their thinking patterns in order to promote a more "decentered" view of mental events. Decentering is a change in the process of thinking by noticing thinking as a process, not an outcome of thinking a particular type or content (e.g. "positive") of thoughts. Unlike traditional cognitive therapy, the focus of this treatment is not to challenge the validity of the content of a particular thought, but to see the thought as a thought, not as a fact. This process of noticing thoughts as passing events of the here and now, allows the client to detach from the certainty or literality of them, reducing the likelihood of additional dysfunctional thinking patterns such as rumination about the future. Evidence suggests that this detached or decentered approach may help clients prevent the formation of dysfunctional thinking patterns that contribute to relapse to depressive episode after having experienced several such episodes (Teasdale 1997; Teasdale *et al.* 2000). It also improves autobiographical memory in clients with depression (Williams *et al.* 2000).

DBT (Linehan 1993a) is another new behavior therapy. It uses mindfulness to assist clients in becoming more aware, and hence more accepting, of their emotional experiences. DBT combines such procedures with traditional behavioral strategies to assist clients in changing current problematic responses to emotional experiences, such as self-injury. Traditionally applied with people who have been diagnosed with borderline personality disorder, DBT is used to help clients become less phobic of their emotions in order to assist clients in learning additional ways of effectively regulating their emotions (Fruzzetti *et al.* 2003) in accordance with their goals in life. DBT as a whole treatment has been effective in treating symptoms of borderline personality disorder (Linehan *et al.* 1991,

1993) as well as co-occurring substance dependence (Linehan *et al.* 2002) and eating disorders (Telch *et al.* 2001).

IBCT (Jacobson and Christensen 1996) is another third wave behavioral treatment which uses acceptance as a primary means to achieve client goals. The integration of acceptance with direct change strategies represented the transition from Traditional Behavioral Couples Therapy (TBCT) (Jacobson and Margolin 1979) to IBCT. Acceptance in this treatment refers to one person abandoning a previous control agenda that has historically not achieved desired results by attempting to change a romantic partner's behavior. There are two goals for the use of acceptance in IBCT: (a) enhance intimacy between partners in a relationship and (b) assist partners in letting go of the struggle to change one another. The three primary acceptance interventions used in this treatment to accomplish these goals are: Empathic Joining, Unified Detachment, and Tolerance Building. Treatment outcome research on IBCT shows that the treatment is beneficial with distressed couples (Cordova *et al.* 1998; Jacobson *et al.* 2000) even when compared to TBCT (Christensen *et al.* 2004).

Acceptance and Commitment Therapy (ACT) (Hayes *et al.* 1999) is another new behavioral treatment that balances mindfulness and acceptance strategies with direct behavior change strategies. ACT teaches mindfulness and acceptance through metaphors and experiential exercises in order to reduce the detrimental effects associated with avoidance of private experiences. Fostering accepting of experience allows clients to become more flexible in their responding to private events and assists them in focusing on accomplishing goals in life that serve larger values. Outcome data on ACT has been successful in a wide variety of areas including substance abuse (Gifford *et al.* 2004), coping with psychosis (Bach and Hayes 2002), stigma and job burn out (Hayes *et al.* 2004b), worksite stress (Bond and Bunce 2000), and several other areas (see Hayes *et al.* 2004a for a recent review. See also the November 2004 special issue of *Behavior Therapy* on ACT).

The rest of the chapter is devoted to examining mindfulness as it pertains to the core processes that are a part of ACT. First, a brief overview of the underlying theory of ACT is given in order to illustrate the detrimental effects of language as it pertains to clinical psychology. From there, we briefly describe ACT processes to demonstrate how mindfulness and acceptance are used in this treatment to overcome the detrimental effects of language and foster a more present and accepting approach to private events in clients. Finally, ACT is compared to other approaches that use mindfulness and considers how Buddhist traditions such as mindfulness are being incorporated into empirical clinical psychology.

## Theoretical basis of ACT

ACT claims that language and cognition (e.g. reason-giving, problem solving, analyzing) are at the core of human suffering (Hayes *et al.* 1999). While an evolutionary triumph, language also brings many dilemmas. Because of its useful nature, language helps us to solve complex human problems but language can also be mischievous and problematic. Language enables us to constantly evaluate ourselves,

to compare ourselves to an unrealistic ideal, to bring our painful past into the present, and to project fearsome futures. Given its ubiquitous nature, language penetrates almost all life contexts. Its dark side can cause suffering unique to human beings.

### *ACT basic theory: Relational Frame Theory*

The ACT approach to psychopathology and treatment is based on Relational Frame Theory (RFT) (Hayes *et al.* 2001), a comprehensive contextual theory of behavioral processes underlying language and cognition. According to RFT, human beings learn to derive and combine stimulus relations and bring them under arbitrary contextual control. When we think, reason, speak with meaning, or listen with understanding, we do so by deriving relations among events – among words and events, words and words, and events and events. From the RFT perspective, language itself is an instance of this relational learning.

Relational learning of the sort studied in RFT has five key properties. The first is termed mutual entailment or bi-directionality. That is, if a person learns that A relates in a particular way to B in a particular context, then this must entail some kind of relation between B and A in that context. For example, if "going to a bar" is said to provoke more anxiety than "going to class," we can derive the relation that "going to class" is less anxiety provoking than "going to a bar" without direct training. Second, such relations show combinatorial entailment: if a person learns in a particular context that A relates in a particular way to B, and B relates in a particular way to C, then this must entail some type of mutual relation between A and C in that context. For example, if going on a date is said to be more fearful than going to a bar, then going on a date is also more fearful than going to a class. Third, mutual and combinatorial entailment are under arbitrary contextual control (the relational context or "$C_{rel}$") and thus these relations can be applied to any set of events regardless of their formal properties if $C_{rel}$ cues are present. For example, a nickel can be said to be larger than a dime, even though it is not in a monetary sense. Such relations enable a transformation of stimulus functions among related events. If a person who acquires these relations is asked to be exposed to one of these events, the person is unlikely to choose to go to a bar, and even more unlikely to go on a date.

The transformation of stimulus function is especially relevant to clinical problems because functions (in this case psychological impact) given to one member event of several related events tend to alter the function of other members. For example, if one experiences the feeling of panic in a classroom and then begins to avoid the classroom situation, one may now also avoid going out to bars and going out on dates. These changes may occur even though one does not experience panic in all of these situations initially and these contexts do not share many of the formal properties of the classroom. Finally, transformations of stimulus functions are themselves under arbitrary contextual control that selects the relevant functions (termed $C_{func}$ for the functional context).

For ACT, RFT is important not only because it helps capture the complex and ubiquitous nature of language, but also because it highlights the importance of the

context in which language and cognition occurs. Traditional cognitive and behavioral treatments have taken a very first-order approach to thoughts and feelings: as if they possess inherent functions. However, RFT suggests that the function of these events is determined contextually and thus the impact of even difficult thoughts and verbally entangled feelings can be undermined. Thus ACT focuses far more on the use of $C_{func}$ interventions that alter the functions of difficult private events than on $C_{rel}$ interventions that attempt to alter the form of relational networks (e.g. beliefs, schemas, and so on).

## Theory of psychopathology: psychological inflexibility

From an ACT perspective, the principal problem that clients have is the narrowness and inflexibility of their functioning in a given life context (Hayes 2004). Clients spend time and energy avoiding and escaping from their aversive private experiences at the expense of engaging in vital actions that correspond with their values. ACT calls this phenomenon psychological inflexibility and argues that language plays the major role in this trap (Hayes 2004).

### *Cognitive fusion*

Language becomes the dominant source of regulating our behavior, to the point that we may interact more with our verbal conceptions of the world than with our own experience. This phenomenon is termed "cognitive fusion." There are two major problems with cognitive fusion that result in psychological inflexibility. One problem is that verbal rules (e.g. thoughts) themselves are very persistent. Once they are derived, they never seem to go away (Wilson and Hayes 1996). We can add to them, but we cannot readily eliminate them altogether. For example, once we develop the thought "I'm stupid," it is unlikely to disappear entirely, at least in some form, because relational networks are historical and developmental. Another problem is that behavior regulated by verbal rules is also relatively inflexible (Hayes 1989). Verbal rules tend to restrict the range of available behavior and undermine the impact of the consequences of actual experience. Stated differently, in some contexts we continue to engage in what our mind tells us to do regardless of its consequence.

### *Experiential avoidance*

Experiential avoidance is a salient result of cognitive fusion (Cioffi and Holloway 1993; Hayes *et al*. 1996). Experiential avoidance is the attempt to fix and control the form, frequency, or situational sensitivity of private events (e.g. thoughts, feelings, bodily sensations, and memories). There are two main forms of experiential avoidance: suppression and situational escape or avoidance. Suppression is the active attempt to control and/or eliminate the immediate experience of a difficult private event. Situational escape and avoidance is the attempt to avoid situations that are associated with unwanted psychological struggles.

It is quite normal to think that attempts to eliminate and avoid aversive stimuli will eliminate suffering, and that the elimination of suffering is the achievement of well-being. This kind of problem-solving strategy works well in many parts of life. But although it may reduce psychological struggle, in the short run, the application of this strategy to private experiences does not eliminate psychological suffering, it tends to increase the functional importance (and perhaps even the frequency) of negative private events. The literature on thought suppression and emotion-focused avoidance strategies, captures this inherent paradox in our attempts to control and avoid unpleasant psychological events (Cioffi and Holloway 1993; Clark *et al.* 1991; DeGenova *et al.* 1994; Wegner *et al.* 1987). Nevertheless, because of the insensitive nature of behavior regulated by verbal rules (e.g. over-generalization), experiential avoidance continues despite its paradoxical effects in the long run.

## Psychological flexibility: six core processes of ACT

ACT targets the narrowness of the behavioral repertoire in the present context as the source of psychopathology and aims to increase "psychological flexibility" in the client's life. Psychological flexibility is the ability to contact the present moment more fully as a conscious human being, and based on what the situation affords, changing or persisting in behavior in the service of chosen values (Hayes 2004; Hayes *et al.* 2005). Psychological flexibility is established in ACT through six core processes; acceptance, defusion, self as context, contact with the present moment, values, and committed action (see Figure 21.1). As is shown in the figure, these processes can be categorized into two larger and overlapping groups: acceptance and mindfulness processes and commitment and behavior change processes.

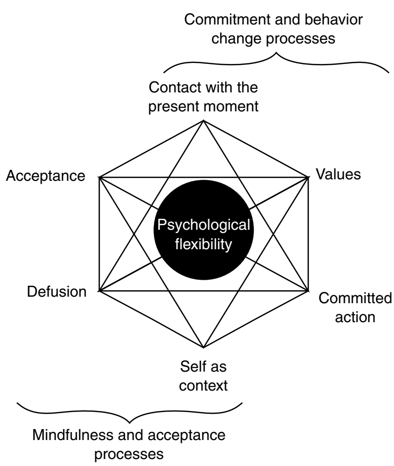



*Figure 21.1* The facets of mindfulness processes and commitment processes underlying ACT.

### *Acceptance*

Acceptance means to take in what is offered, and in the psychological domains this means feeling what one is feeling, sensing what one is sensing, remembering what one is remembering and so on. Acceptance provides clients with an alternative approach to private experiences that avoids the paradoxical nature of experiential avoidance. Acceptance should not be confused with tolerance or resignation, both of which are passive and fatalistic. Acceptance involves an active embrace of experience, openly, and without defense.

### *Defusion*

Undermining the literal impact of language can create a context in which the process of thinking is contacted rather than simply contacting the world as structured by thinking where an individual fully experiences an event as it is. As RFT states, the problem is not the content of thoughts, but their function in generating experiential avoidance. ACT aims to alter their functions by manipulating the context where they occur, rather than engaging in paradoxical attempts to eliminate their occurrence (Hayes and Wilson 1994). Clinically, ACT encourages clients to change their relationship with thoughts and other private experiences and view them as mental events that come and go, one after another. Clients learn to see thoughts as thoughts, feelings as feelings, memories as memories, and so on.

### *Self as context: a transcendent sense of self*

In its quest to change people's relations to their private experiences, ACT teaches clients to experience an alternative perspective of self: self as context. In general, we identify ourselves with content. As an indication of this verbally established process, if we are asked about ourselves we often generate formal content by referring to our work, personality characteristics, roles, and so on – thoughts about ourselves. The content we identify with may be content of our thoughts or other private experiences, such as feelings. While practical and effective in some contexts, this tendency can reduce our psychological flexibility and be limiting in other circumstances. For example, people who think of themselves as depressed may act in such a way to confirm this sense of identity and may even be threatened by fundamental changes in this area. One of the alternative perspectives is to view and experience self as the context in which private events occur. This self is the self that experiences the present moment, and is the same self that experienced years ago and will continue to experience in the future. The great advantage of this sense of self is that it is experienced as an arena in which the content of consciousness is not threatening. ACT aims to develop this self that is present in the experience of the present moment, and does not depend on content.

### *Self as process and being present*

ACT promotes clients' raw experience in the present moment. When immediate experience is added to the state of self as context, this composes self as process, self as a process of ongoing awareness of events and experiences (e.g. now I am feeling this; now I am thinking that). In order to enhance this experience, clients are encouraged to notice and describe what is present in the environment and their immediate private experience, without judgment or evaluation. Efforts to develop and emphasize these new perspectives of "self as process" and "self as context" are directed towards helping clients experience the world directly, rather than as constructed by our linguistic practices. These experiences of self are both inconsistent with cognitive fusion and experiential avoidance (e.g. categorical and evaluative traps of language).

The idea and techniques of contacting private and situational events is not unique to ACT within the behavioral and cognitive therapies, regardless of whether they are from the first, second, and third wave. What is different in ACT is that these techniques are not used as a mood-altering tool (e.g. to eliminate anxiety or increase sense of relaxation). Behavioral and cognitive behavioral exposure techniques, for example, are often used to eliminate difficult feelings triggered by these events. In ACT, similar techniques are used to facilitate contact with the present moment and great psychological flexibility. In fact, however, ACT methods do tend to lead to reduced levels of aversive emotions, since great psychological flexibility frees up emotions to assume levels appropriate to the direct situation.

### *Values*

Psychological flexibility involves not only accepting difficult psychological experiences, but also functioning adaptively in the present moment. Values are chosen qualities of purposive action, which can be instantiated but not processed as objects. Clients are challenged to consider what they want their life to stand for in different life domains such as career, family, intimate relationships, friendships, personal growth, health, and spirituality. Simply put, values provide clients with direction in life. Although these chosen qualities are verbally embraced, it is the actual qualities of purposive action that define them. Values without action are not values at all.

### *Committed action*

ACT encourages clients to commit to acting in accord with their values, moment by moment. Commitments in ACT involve defining goals in specific areas that comport with one's valued path, then acting on these goals. ACT also encourages the acknowledgment of psychological barriers that may arise and might allow language processes to stand in the way of experiencing actual possibilities. In

enhancing committed action, the intervention tactics of ACT vary greatly depending on the individual client and individual problem.

It is important to note that each of the six specific processes relates to and interacts with the other processes. Some of these relations involve shared functional properties. For example, acceptance and defusion both undermine the literal impact of language processes; self as context and contact with the present moment both involve increasing the raw experience of "here-and-now"; values and committed action both involve building out the practical and effective aspects of language and overt behavior.

## An ACT account of mindfulness

Mindfulness has been cast as a spiritual method, psychotherapeutic method, and as a psychological process, and the overlap between these uses has created a good deal of confusion (Hayes and Wilson 2003). The third wave interventions in behavior therapy, ACT among them, are scientifically based approaches. As such, it seems incumbent upon them not simply to treat mindfulness as a method:

> Due to its history, mindfulness . . . is often linked to the practice of mindfulness meditation (e.g. Kabat-Zinn 1994). If mindfulness is an operationally defined functional process, however, then any technique that produces this process must be considered to be a mindfulness technique. The role of meditation or any other technological component becomes an entirely empirical matter. It could be necessary, or unnecessary – the data will have to decide
>
> (Hayes and Shenk 2004)

Because of its mystical and spiritual foundations, an empirical conceptualization of mindfulness has been difficult for psychologists (Baer 2003). In addition, there is a great deal of ambiguity about mindfulness as a unique process as compared to other processes and methods such as relaxation or interoceptive exposure (Craske and Barlow 1993). Consequently, agreement on a conceptualization of mindfulness has been elusive. For instance, Kabat-Zinn (2003: 145) defined mindfulness as, "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment." Teasdale *et al.* (2000: 616) use mindfulness to "teach individuals to become more aware of thoughts and feelings and to relate to them in a wider, decentered perspective as 'mental events' rather than as aspects of the self or as necessarily accurate reflections of reality." To incorporate mindfulness into a clinical and empirical psychology, a naturalistic, theoretically sound, and empirically useful conceptualization of mindfulness is needed.

At the functional process level, mindfulness from the perspective of ACT and RFT is the combined process of acceptance, cognitive defusion, self as context, and being in the present moment. In brief, acceptance and defusion are designed to undermine the verbally produced rigidity that mindfulness targets, and self as context, and being present situates action in accordance with the moment and chosen values. Thus, we may define mindfulness as willingly contacting events as a conscious human being, in a continuous sequence of moments of now, as they are and not as they say they are. Like other definitions of mindfulness, this definition includes non-judgmental awareness, but unlike these definitions, it emphasizes the defusion process that underlies such a non-evaluative contact with events. Mindfulness, viewed from this perspective, is a broader process than often noted: it involves an accepting and defused contact with the present moment, from the conscious perspective of "here/now."

These four mindfulness processes targeted by ACT are interdependent, which is why more limited definitions are not fully sufficient. In order to allow presence with immediate experience, there must be acceptance of thoughts and feelings that may arise. If one engages in arguments with thoughts and feelings, presence has moved from immediate experience to verbal experience. In order to accept, cognitive defusion is needed, because it allows thoughts to be perceived as thoughts, and does not require them to be avoided or disputed. Once acceptance and defusion have made room for immediate experience to occur, there must be a transcendent sense of self to provide a context for that experience. From the point of view of a conceptualized self, acceptance and defusion are virtually life threatening. Self as context is the self defused from any verbal content, that when placed in the stream of immediate experience it enables ongoing contact with the previously avoided content – which in turn becomes self as process.

## Comparing ACT to other approaches using mindfulness

### *Parallel between Buddhism and ACT*

Some of the parallels between Buddhism and ACT have been discussed elsewhere (Hayes 2002). In this section, we will briefly overview similarities and differences between the two schools on the following topics: inevitable nature of suffering, acceptance and mindfulness, valued action, and self.

#### *The ubiquitous nature of human suffering and human language*

One of the most striking messages from Buddhist teaching is that life is suffering, because everything is impermanent and constantly changing (i.e. the

First Noble Truth). In the first sermon delivered by the Buddha after enlightenment (the Dhammacakkappavattana Sutta, or the Discourse on the Setting in Motion the Wheel of Dhamma), he said "Birth is suffering, death is suffering, sorrow, and lamentation, pain, grief, and despair are suffering, association with the unloved or unpleasant condition is suffering, separation from the beloved or pleasant condition is suffering, not to get what one wants is suffering" (SN.5.421, as cited in Dhamma 1997: 17–18). We are born independent of our will. As soon as we are born, we will suffer from age, disease, and eventually death. While we are alive, it is inevitable that we experience the separation from loved ones and encounter people we do not want to see. Our desire and wishes are not always fulfilled and we cannot refuse to feel psychological and physical pain. Although Buddhism does not claim that our life is solely suffering, the inevitability of suffering is a strong theme.

The Second Noble Truth states that suffering comes from attachment and craving (SN.5.421, as mentioned in Hagen 1997). Faced with a number of difficulties in life, we spend a great deal of time and energy attempting to achieve a pain-free life. In Buddhism this very attempt and desire to not have problems is itself a major problem. Tsushimoto (1999), a student of Zen, for example, stated that events become problems only if we excessively attach to them. In Shobogenzo-zuimonki, one of the major texts of Japanese Soto-Zen, Dogen, the originator of Soto-Zen, claimed, "Most people in the world are being dragged about by discriminating good from evil, distinguishing right from wrong, seeking after what is good while discarding what is bad" (Shobogenzo-zuimonki 1989: 2–4). Thus, there seems to be agreement among Buddhists that the core difficulty comes from our approach to problems.

Some Zen scholars have also discussed the link between everyday linguistic practice and attachment to craving. For example, D. T. Suzuki (1997), a controversial Zen philosopher argued that our linguistic practice is inevitably dualistic and categorical and we are likely to see and interact with the world through this linguistic filter. This dualistic perspective results in psychological conflicts (e.g. comparison, evaluation, and explanation) among events categorized and generates suffering.

There are close parallels between these broad components of Buddhist thinking and ACT. This overlap is all the more remarkable since ACT did not emerge from Buddhism, but from a behavior analytic theory of language. In ACT, suffering is viewed as an inevitable part of human existence due to the nature of human language itself. From an RFT perspective (Hayes *et al*. 2001), the arbitrarily applicable and bi-directional nature of human language can bring psychological pain into almost all life contexts. Unable to control pain by controlling situations, humans almost inevitably try to avoid pain itself. This is experiential avoidance. Furthermore, the categorical, temporal, and evaluative aspects of language are needed for verbal problem solving but these lead inevitably to cognitive fusion, which further increases pain due to memory, regret, anticipation, and comparison. When we interact with our problem, we

do so verbally. We evaluate and categorize them, and compare them to an imagined ideal that includes an absence of the problems noticed. As we fuse with these formulations, however, we become less in contact with the present moment, and less open to experiences that are evoked by moment by moment change in the reality. Many of our problems are very likely historical and conditioned, and as we attempt to avoid them we may increase their frequency and importance. Because of the insensitive nature of behavior regulated by verbal rules, fusion, and experiential avoidance continues despite its unworkability. In ACT, suffering is viewed as the amplification of pain caused by these dual processes of experiential avoidance and cognitive fusion. As the quotes and citations show, this is in close agreement with Buddhist thinking across a range of scholars.

## *Self*

In Buddhism, the idea that the world is full of distinctive objects/events, including self, is an illusion. Because of our linguistic practice, self is often construed as a distinctive, independent, and autonomous being. By breaking through the literal trap, the web of interdependency and impermanence is experienced. The self is blended into the whole: Our world becomes our self.

ACT considers three kinds of self: a conceptualized self, self as an ongoing process of knowing, and self as the context of known experience (Hayes *et al.* 1999). ACT attempts to undermine the conceptualized self, an attachment to a literal conception of who we are, while helping clients experience self differently (Hayes 2002). Self as an ongoing process of knowing is a perspective of self as the ongoing flow of observation and description in the moment. This seems to be quite close to the kind of non-judgmental awareness in the moment that is fostered through mindfulness practice and is referred to by many students of mindfulness (e.g. Kabat-Zinn 2003, quoted earlier).

There may be a difference between Buddhism and ACT in the third sense of self in ACT: self as a context (Hayes 2002). Self as a context is an experience of self that is something unchanged throughout a person's life. ACT helps clients establish this sense of self to facilitate acceptance in the present moment. In ACT, the sense of stability that is experienced by this perspective seems to be crucial for a client to confront even extreme psychological suffering and life struggles. This perspective of self might conflict with Buddhists ideas of anti-essentialism (Hayes 2002). However, it is important to note here that self as context is not a belief or an object of consciousness, but rather consciousness itself: experientially boundless and endless. It is not a thing because it has no edges that can be experienced. In an ACT model, self as context is the naturalistic basis of human spirituality (Hayes 1984). This "no thing" sense of self seems closer to certain Buddhist concepts of "true self" – being one with the universe. This is an issue that seems to require

further examination from a Buddhist perspective more sophisticated than that of the authors.

### *Acceptance and mindfulness*

The Third Noble Truth is that the ending of sorrow comes from letting go of self and desire (SN.5.421). The Buddha described the cessation of suffering in his Third Noble Truth as "giving up, renouncing, relinquishing, detaching from craving" (Dhammacakkappavatana Sutta, as cited in Dhamma 1997: 18). Stated another way, Dogen also claimed, "In learning the Way, you must depart from your ego.... To depart from your ego means throwing your body and mind into the great ocean of Buddha-dharma" (Shobogenzo-zuimonki 1989: 5–9).

Buddhism and ACT seem to share some features of this approach to difficult psychological experiences. Like Buddhism, ACT does not seek to eliminate or fix difficult private events in their form and frequency. By undermining the literal impact of language and its avoidant results, ACT undermines attachment. Furthermore, by producing contact with a transcendent "no-thing" sense of self, ACT undermines attachment to the conceptualized self and helps produce an experience of wholeness. From that perspective, problems are not so much eliminated from our life, as they are blended into life.

### *Values and committed action*

Some Buddhist scholars have argued that undermining attachment is not the ultimate goal of practice. Rather, one strives to live fully in the present moment. Buddhism's Noble Eightfold Path is not a set of conceptual understandings or beliefs, but enduring *actions* in every context of our lives. Similarly, Dogen stated, "if you had entered a certain path, you would first have to devote yourself to... the path" (Shobogenzo-zuimonki 1989: 1–4) and "...racticing by following the Buddha-dharma no matter how much pain or anxiety you may have" (Shobogenzo-zuimonki 1989: 5–9). S. N. Goenka, a modern Buddhist teacher, stated it this way: "This is holy indifference: neither inaction nor reaction, but real, positive action with a balanced mind" (Hart 1987: 54).

ACT also teaches clients to live fully in harmony with one's values while accepting and experiencing difficulties in life. Well balanced living with values is not behavior regulated by verbal rules for the sake of following rules. Rather, it is a vital and spontaneous action of living in accord with a chosen path.

## Mindfulness based cognitive therapy and ACT

For some time, cognitive approaches to psychotherapy have held that depression was primarily related to certain dysfunctional beliefs and that reducing

these beliefs would result in a corresponding improvement in mood. Although cognitive therapy was found to reduce depression, it was not found to reduce the level of reports of these dysfunctional beliefs more than pharmacotherapy in studies where it appeared to be more effective (Simons *et al.* 1984). This is consistent with the RFT analysis of the functioning of language, which suggests that verbal networks are more easily elaborated and enriched than eliminated.

Segal *et al.* (2002) hypothesized that when cognitive therapy was effective, it might be the relationship of the client to the dysfunctional thoughts, and not the thoughts themselves, which were changing. They described a process of distancing that they believed was occurring when dysfunctional thoughts were examined and challenged. Although this process of "distancing" or "decentering" had been identified before, it was seen as a method to better dispute dysfunctional thoughts, rather than the goal of this process (Segal *et al.* 2002). This underlying hypothesis and their examination of this distancing process is much the same as the process of cognitive defusion in ACT. Indeed, ACT was originally known as "Comprehensive Distancing" (Hayes 1987).

MBCT teaches participants to notice thoughts, feelings, and bodily sensations through meditations and exercises emphasizing a focus on the immediate moment. MBCT refers to a "being" mode, in which the immediate moment is dominant, versus a "doing" mode, in which the focus is on evaluative verbal activity. Through exercises intended to increase awareness of immediate experience, MBCT aims to allow participants to notice when verbal activity is disrupting contact with immediate experience so that patients can return to a mindful mode in which there is more distance from depressive thoughts.

### *Attention and body, thoughts, and emotions*

MBCT involves meditations that encourage participants to notice bodily sensations and practice acting and experiencing while in contact with the present moment. Everyday activities may be performed slowly with a moderator directing attention to different elements of the experience. These activities may include attending to the breath, or exercises like walking mindfully, focusing on the act of walking itself and just noticing any thoughts that come up.

Like ACT, MBCT encourages acceptance of thoughts that come up for participants, while also emphasizing the identification of thoughts as thoughts. MBCT also involves a component of education about patterns of dysfunctional thinking or "mind chatter" that can help clients identify when mental attention has moved from their present experience to this kind of thinking. MBCT encourages clients to notice their emotions as emotions, and also to notice that they are not their emotions. Exercises may point out that feelings may change over time, as may their intensity, aiming to separate emotional content from self. MBCT also encourages clients to allow their feelings to occur for them, rather than ruminating about them.

### *Acceptance*

When attention to the immediate moment has been practiced, MBCT hones this skill by also teaching acceptance. When a thought, feeling or bodily sensation is evaluated as unacceptable, this is a cue that one has entered the "doing" mode, where the mind is problem solving rather than experiencing. Meditations focus on bringing up aversive thoughts or feelings and then holding them, rather than reacting to them or evaluating them. Like ACT, MBCT teaches that pushing away thoughts or feelings that are evaluated as negative, may actually paradoxically maintain them.

### *Examining thoughts*

MBCT not only directs clients to notice thoughts, but also emphasizes that thoughts are not facts, and encourages the experience of them as mental events, rather than perfect representations of experience. It teaches that distance from thoughts is not necessarily answering them back, which may often lead further down the same road where mental events are substituted for experience. Participants may be asked to try to watch thoughts, notice if they are "automatic" responses, and examine surrounding elements in their experience. Thoughts are also delineated from self. The conception of how this process should function has many similarities to the cognitive defusion process in ACT (Masuda *et al.* 2004), which also emphasizes noticing thoughts as thoughts.

### *Self care*

MBCT teaches clients to notice links between activities and mood and try to structure their lives to maximize positive activities and have activities associated with negative mood be less detrimental. MBCT also directs clients to have plans of action to deal with periods of depressed mood that involve finding their distance from negative thoughts and feelings, focusing on experience, and engaging in these positive activities. This has some overlap with the values and committed action portions of ACT, although it is more focused on mood than on values per se.

## Dialectical Behavior Therapy and ACT

Many similarities exist between DBT and ACT. The broadest similarity between these two treatments is the use of both acceptance and behavior change strategies in order to more effectively help clients reach their desired goals. Specifically though, these two treatments are similar because: (a) they focus on increasing a client's awareness to current private events for the purpose of fostering a more accepting relationship with these events, (b) they target a client's ability to tolerate painful experiences directly so that old behavioral patterns are no longer reinforced and conversely new, more adaptable patterns are espoused, and (c) they use particular therapist techniques, such as metaphor and paradox, to illustrate current client experience and foster change in accepting ways.

### *Mindfulness*

DBT draws largely on the Buddhist concepts of mindfulness as described by Jon Kabat-Zinn (1990) and Thich Nhat Hanh (1976). DBT uses mindfulness to promote awareness of private events through an ongoing process of using purposeful attention in one of three ways: observing *what* is in our attention, describing *what* is in our attention, or participating in *what* is in our attention (Dimidjian and Linehan 2003; Linehan 1993b). However, mindfulness in DBT also requires that a person use these three "what" skills in three particular ways: non-judgmentally, one at a time, and effectively. Hence mindfulness in DBT is characterized by combining both the attentive component of mindfulness with a non-evaluative or accepting stance toward the stimuli in our attention. Mindfulness of emotion in this manner is practiced so as to continually change the current relationship a client has with their emotions.

Similarly, ACT also takes a primary focus in changing the relationship that clients have with private events through mindfulness. ACT uses mindfulness to assist clients in letting go of current efforts at control, such as avoiding painful private experiences, in order to be more aware of efforts at controlling or escaping these experiences. Mindfulness in ACT also incorporates the attentive component of mindfulness with a non-evaluative stance toward private experience. The range and flexibility with which a client is able to do things is argued to increase due to a changed relationship to previously avoided or escaped private events, such as emotion or cognition. Increasing a client's non-evaluative awareness to current events allows for additional techniques in ACT to be used more effectively (e.g. values, committed action).

### *Distress tolerance*

Another area in which ACT and DBT are similar is the approach these treatments take when clients are currently experiencing painful thoughts or emotions. For instance, DBT has a set of skills called Distress Tolerance (Linehan 1993b) that are used by clients when they are in painful situations and are contemplating old, dysfunctional patterns of behavior such as self-injury or the use of substances. By tolerating the distress instead of engaging in behavior to avoid or escape it, these clients are in effect accepting their current position of distress and changing the causal relationship they have with these painful emotions by not engaging in the dysfunctional behavior. Not engaging in dysfunctional behaviors in effect reinforces the accepting approach to painful emotions and allows clients to prevent themselves from participating in dysfunctional behavior in the future.

This approach to distressing or painful private events is similar in ACT. For instance, helping clients to notice their thoughts as an ongoing process of wanting to engage in previous attempts at controlling or avoiding private events (e.g. thought suppression) is one way to help the client defuse from causal thinking in the moment. Again, adaptable behavioral repertoires seem to be restricted in moments of distress. Assisting the client to realize that there are more flexible

choices other than avoidance behaviors is the process by which clients can come to accept painful emotions as opposed to avoid them.

### *Use of metaphor and paradox*

Both DBT and ACT use metaphor and paradox as ways to assist clients in either achieving "wise-mind" goals (Linehan 1993a) or to commit to actions that serve larger personal values (Hayes *et al.* 1999). The use of metaphor and paradox is not a new psychological technique. They have been practiced for centuries in Buddhist traditions. However, only recently has the therapeutic benefit and known behavioral processes underlying the use of metaphor and paradox been illustrated (Hayes and Melancon 1989; Stewart *et al.* 2001). In DBT and ACT, metaphor and paradox are means to treat language with language. Metaphor allows an ACT or DBT therapist to take the "self" out of a particular situation and allow the client to see how dysfunction can occur through natural human processes. In addition, paradox can be used to illustrate the futility of current actions to achieve desired goals.

### *Integrating mindfulness into empirical psychology*

Recent cognitive and behavior analytic theory both support an empirical approach to changing the relationship individuals have with private events. For instance, Wells (1990, 2002) asserted that the goal of effective cognitive therapy is to change the processes of current thinking patterns through guided attention. This emphasis on guided or redirected attention alters thoughts at a metacognitive level, producing the effects of seeing thoughts as thoughts and not as literal events needing to be refuted or challenged. Wells contends that mindfulness has several potential effects on a person's thinking habits but specifically mentions that mindfulness can "decouple the influence of maladaptive metacognitive beliefs on online processing; that is, they enable patients to be aware of internal/external threats without activating counterproductive worry/ruminative styles of thinking" (2002: 96). Thus, simply being aware of private events in the present moment can alter the function of thoughts and emotions.

RFT also claims that a defusing process occurs when mindfulness is applied to a client's difficulties. Acceptance and defusion in ACT is based on the idea of noticing verbally entangled private events as they occur: as a continuous stream of events and not literal truths or causes for action (Hayes and Brownstein 1986). The advantage of such an approach is two-fold. First, it may be possible to break down complex phenomena into more focused and discrete processes that can then be researched. Second, these component processes and the techniques that produce them can be researched in highly specified ways. For example, very specific methods of producing cognitive defusion can be studied (e.g. Masuda *et al.* 2004), and based on their utility included in mindfulness protocols. Focusing on behavioral processes over formally defined psychological techniques allows researchers and clinicians to use a wider variety of methods across clients

in order to enhance treatment outcomes, but without the danger of incoherence that technical eclecticism often carries.

## Conclusion

Even though there are slight discrepancies in current conceptualizations of mindfulness, similarities are evident (Dimidjian and Linehan 2003). This chapter sought to conceptualize mindfulness from a contextual behavioral perspective and to outline the similarities between third wave cognitive and behavioral therapies that use mindfulness techniques. Buddhist ideas and methods are not mere historical relics: their functional core is revisited in light of contemporary issues and developments. If the empirical clinical traditions are going to bring Buddhist concepts and methods into modern empirical clinical approaches, we need to learn how to examine these processes empirically and conceptually (Hayes and Shenk 2004). Mindfulness is an ancient method, but it is also a researchable and scientifically understandable psychological process.

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# 22

# BUDDHIST PRACTICES AND EMOTIONAL INTELLIGENCE

## Finding the convergence

*Joseph Ciarrochi*

It is hard to question the first major tenet of Buddhism: suffering is the human condition (Santina 1984). Research indicates that feelings of anxiety and depression are at high levels in world populations (Hayes *et al.* 1999; Ciarrochi *et al.* 2003). Up to one-third of people have a diagnosable mental disorder. In addition, about half of the population will face moderate to severe levels of suicidality sometime in their lives (Hayes *et al.* 1999).

Buddhist teachings maintain that much of this suffering is unnecessary, and suggest practices for reducing it (Kabat-Zinn 1994; Kapleau 1989). There is now substantial support for the value of some of these practices (Alexander *et al.* 1993; Baer 2003; Bogart 1991; Hayes *et al.* 1999; Teasdale *et al.* 1995), yet many people are often unaware of them or dismiss them off hand as "religion" or superstition.

This chapter will describe some potential barriers to accepting Buddhist practices and suggest ways that the barriers can be overcome. Specifically, I argue that major Buddhist practices can be clearly tied to a psychotherapeutic position, offering the potential for scientific evaluation (Hayes *et al.* 1999). I further suggest that people become more receptive to Buddhist practices when such practices are placed into an emotional intelligence framework.

### Buddhism and acceptance and commitment therapy (ACT)

There are millions of practicing Buddhists worldwide (Baumann 1997; Biema 1997). Many major cities have Buddhist temples and organizations, and bookstores have entire sections devoted to Buddhism. There is little doubt that interest in Buddhism is strong.

Even so, it is hypothesized that many people disregard potential benefits of Buddhist practices because of a number of inaccurate assumptions. First, many believe that Buddhist practices involve religious assumptions that are inconsistent

with their own religion. Second, some may connect Buddhism with the "irrational" and with "superstition." Third, it may be thought that Buddhism requires a lifetime of meditation and asceticism, which may not be seen as possible in a modern world of family and work commitments. Fourth, people may see Buddhism as too abstract and profound to be fully understood. Finally, Buddhism may be viewed as passive, withdrawn, and largely useless in a world driven by "achievement" and acquisition. A framework is now presented that challenges these prejudices.

Acceptance and commitment therapy (ACT) is a therapeutic approach that has many similarities to Buddhism (Hayes *et al.* 1999). Both ACT and Buddhism are pragmatic and seek to reduce human suffering. Both utilize exercises that increase mindfulness, undermine the illusion of a separate self (or self-esteem), utilize paradox and confusion, and break down experience into various elements. Finally, both ACT and Buddhism appear to discourage unhelpful reliance on verbal rules and concepts. Instead, the individual is encouraged to turn to direct experience for direction.

There are several reasons why it may be easier to overcome biases towards Buddhism if Buddhist-related practices are placed into an ACT framework. First, ACT is grounded in a testable theory of language (see Chapter 21 by Hayes in this volume; see also Hayes *et al.* (2001) for a book length treatment of the theory). Second, scientific research has evaluated and supported ACT's ability to reduce human suffering (Bach and Hayes 2002; Bond and Bunce 2000; Dahl *et al.* 2004; Zettle and Hayes 1987).

ACT may also be useful in overcoming the undeserved view that Buddhist practices promote passivity. ACT puts all its practices in the service of pursuing a valued direction and achieving goals. This goal focus should be appealing to those who want to succeed in the practical world.

Finally, ACT clearly places Buddhist practices in a context where people are free to believe whatever they want to believe. It illustrates that these practices are not inconsistent with particular religious belief systems. For example, ACT, like Buddhism, helps people to become aware of their moment to moment experience (e.g. thoughts and bodily sensations). People learn to see these private experiences for what they are, streams of thought, fleeting sensations, rather than what they often seem to be: fixed, dangers that must be avoided. Thus, they learn to look at their experience from a different perspective. They are not taught to take on faith any particular interpretations of their experience. Indeed, ACT practitioners often tell their clients to "not believe anything they say."

### *ACT and emotional intelligence: broadening perspectives*

It has been shown that once people experience an ACT intervention, they usually recognize the benefits of related Buddhist practices. The challenge is getting them into the intervention in the first place. I have sought to bring ACT into organizations (workplace and schools), but have encountered several obstacles. First, many people do not initially want to learn acceptance. They do not want to accept

obstacles. Again they incorrectly suspect that "acceptance" involves being passive or giving up. Second, organizations generally want interventions to teach a measurable set of skills. In Buddhist practice, the skills that are being taught are often not explicitly measured.

ACT/Buddhist practices have, therefore, been placed in a skills framework. Specifically, it is hypothesized that ACT promotes skills relevant to emotional intelligence (EI), which is defined as the ability to act effectively in the context of emotions and emotionally charged thoughts, and the ability to use emotions as information (Ciarrochi and Godsell 2006). The specific dimensions of EI are presented in Table 22.1, and these factors will be discussed in the next section.

*Table 22.1* The dimensions of emotional intelligence

| *EI component* | *Description* |
|---|---|
| Effective action orientation | Ability to take action that is consistent with goals and values, even in the context of:<br>Impulses, fears, lack of confidence<br>Uncertainty, doubt<br>Feelings of exhaustion or fatigue<br>Physical pain<br>Intense emotion<br>Ability to sustain committed action in the face of inconsistent feedback, frustration, and failure |
| Defusing from unhelpful thoughts and emotions (i.e. undermining the power of unhelpful thoughts and emotions to act as barriers to effective action) | Looking *at* emotions and emotionally charged thoughts, rather than *through* them. Seeing them for what they are: fleeting sounds and images, streams of sensations<br>Seeing that emotionally charged thoughts about life are not equivalent to life<br>Being able to be mindful of moment to moment experience (either internal or external) |
| Using emotion as information | Identifying emotions<br>Understanding the appraisals that are often connected to different emotions<br>Understanding the consequences of emotions on cognition, health, etc.<br>Understanding how emotions progress over time.<br>Distinguishing between helpful and unhelpful emotions and emotionally charged thoughts |

Organizations find the EI framework appealing, perhaps because they can see that they will be learning a concrete set of skills that will make them more effective. People also seem to have the intuition that much of the conflict and suffering in their life is unnecessary and that perhaps EI can help them reduce the conflict. In general, utilizing an EI framework has been one of the most powerful methods we have found for getting people to open their doors to ACT interventions.

Before continuing, it might be useful to define the concept of "emotions" and "mindfulness." Emotions consist of sensations (valenced reaction) and appraisals (the event was "bad" or "good"). They may also be associated with particular images and memories. Emotions are defined as valenced reactions to events, agents, or objects, with their particular nature being determined by the way in which the eliciting situation is appraised (Ortony *et al.* 1988). For example, sadness is defined as a negatively valenced reaction to undesirable events. Anxiety is defined as a negatively valanced reaction to the prospect of a future negative event. In the present paper, "emotions" and "feelings" will be used synonymously.

Concerning mindfulness, we will use Kabat-Zinn's definition. "Mindfulness means paying attention in a particular way: on purpose, in the present moment, and nonjudgmentaly" (Kabat-Zinn 1994: 4). Mindfulness can be divided into a number of components, including "what" skills (i.e. observing things as they come and go, describing them, and participating fully in life), and "how" skills (i.e. taking a non-judgmental stance, one-mindfully focuses on what one is doing, doing what works; Linehan 1993).

### *Putting ACT into an EI framework*

We now turn our attention to the different dimensions of EI that are proposed to undermine the causes of suffering, and to improve one's ability to use emotions as information. The theory underlying this framework is presented in the Hayes chapter (Chapter 21, this volume) and will not be covered in detail here. After describing each EI dimension, we will review a number of EI-relevant measures that appear to tap into the dimensions, and discuss their relationship to well-being/suffering.

One reason to discuss EI-relevant measures is that they allow us the opportunity to evaluate just why Buddhist/ACT type interventions work. That is, they allow us to assess the processes by which the interventions reduce suffering. The measures also allow one to provide feedback to clients. They help to identify client strengths and weaknesses, and provide clients with information about how they are improving in the intervention. The instruments can also guide the development of customized homework assignments for each client (e.g. assignments focused on improving EI-relevant deficits).

## Effective emotional orientation (EEO)

### *Defining EEO*

EEO involves willingness to have private experiences (e.g. anxiety), when doing so fosters effective action (Table 22.1). It also involves accepting the inevitability of unpleasant affect and negative self-evaluation, and recognizing that these private experiences do not have to stop us from pursuing a valued direction (Hayes *et al.* 1999). People low in EEO chronically attempt to escape or get rid of their unpleasant private experiences.

The notion of willingness or acceptance appears to be key to many, if not all, forms of Buddhism (Hanh 1987; Kabat-Zinn 1990; Patel 1993; Santina 1984). For example, meditators are encouraged to develop a passive and relaxed attitude (Patel 1993), to not worry about results, and to focus on seeing and accepting things as they are, moment by moment, in the present moment (Kabat-Zinn 1990).

### *The link between suffering and individual differences in EEO*

EEO is more of a family of constructs, rather than a single idea. While the "family" members are interrelated, they also have statistical uniqueness. In general, all of the EI-relevant measures described in this chapter have these properties. This chapter will focus on measures that have found empirical support from multiple, independent laboratories. Our purpose is not simply to re-label these old measures as EI. I refer to them by their original labels. My main purpose is to place the measures into the ACT/EI framework, and to discuss the relationship of these measures to suffering (poor mental health, low vitality, etc.).

The first individual difference discussed – effective problem orientation – reflects the tendency to see emotional problems as a challenge rather than a threat, and the tendency to face problems, rather than avoid them. There is considerable evidence supporting the link between problem orientation and negative indices of well-being. It has been associated with low depression, anxiety, hopelessness, suicidal ideation, health complaints, and neuroticism (Ciarrochi *et al.* in press; D'Zurilla *et al.* 1998; Elliott *et al.* 1994; Elliott and Marmarosh 1994).

Other research provides some evidence that problem orientation is causally related to well-being. Davey and his colleagues have shown that experimentally induced reductions in effective orientation lead to increases in subsequent catastrophic worrying (Davey *et al.* 1996). In addition, a longitudinal study found that ineffective problem orientation predicted increases in anxiety and stress, and decreases in positive affect (Ciarrochi and Scott 2004).

The White Bear Suppression Inventory is another measure of poor orientation, in that people who score high on it seek to avoid or suppress their private experiences. It has been found to correlate with measures of obsessional thinking and depressive and anxious affect (Wegner and Zanakos 1994).

Finally, the acceptance and action questionnaire (AAQ) measures the willingness to experience thoughts, sensations, and physiological sensations without having to control them, or let them determine one's actions (Bond and Bunce in press; Hayes *et al.* 2003). This measurement has been associated with a range of negative emotional states (Hayes *et al.* 2003). A longitudinal study found that the AAQ predicts mental health and an objective measure of performance, over and above job control, negative affectivity, and locus of control (Bond and Bunce 2003).

In another study utilizing the AAQ, Feldner and his colleagues investigated the role of avoidance strategies in dealing with emotions (Feldner *et al.* 2003).

Participants who scored high and low on the AAQ were administered $CO_2$, which induces an aversive emotional state (racing heart, sweaty palms). Half of the participants were instructed to inhibit their emotional responses, whilst the other half was instructed to simply observe their emotions. Participants high in emotional avoidance showed more anxiety in response to $CO_2$, particularly when instructed to suppress their emotions (Feldner *et al.* 2003).

### *Using emotion as information (UEI)*

The second dimension of EI involves the ability to use emotions as information to inform effective action (see Table 22.1). There are a number of aspects to this dimension, but we will focus on one, namely, the ability to identify emotions. The ability to know what we are feeling is crucial to UEI because emotions often provide us with important information about our desires and the world around us. For example, anxiety results from the appraisal that something undesirable might happen. Anger results from the appraisal that someone has acted unfairly and this has resulted in something undesirable (Ortony *et al.* 1988).

If we do not know what emotion we are experiencing, we will find it difficult to act effectively. For example, if we do not know that we are anxious, then we may mistakenly think our anxious sensations are due to a physical sickness (Taylor 2000). Or we may mistakenly blame our anxiety on some irrelevant event (our colleague's behavior), and seek to change this irrelevant event, rather than focusing effectively on the real problem. Essentially, we need to be able to utilize emotions as information if we are to act effectively.

The UEI dimension links fairly straightforwardly to ACT theory. ACT suggests that we tend to evaluate our unpleasant private experiences as bad and subsequently try to avoid them. Attempting to push emotions away may lead us to become less aware of what those emotions are. Consistent with this view, experiential avoidance has been shown to correlate substantially with difficulty in identifying feelings (Godsell and Ciarrochi 2004).

It is likely that Buddhist mindfulness practices increased UEI. Specifically, mindfulness practice that focuses on private experiences (Linehan 1993) would be likely to increase our ability to notice emotions. For example, we may be in a better position to notice when we are anxious and to discover the situations that we find threatening. As a result, we may be better able to act effectively to deal with the situation. Future research should directly evaluate if mindfulness practice increases the ability to identify emotions.

### *The link between well-being and individual differences in using emotional information*

The measures discussed here focus on people's ability to identify their emotions. There are ability-based measures of emotion identification, with right and wrong answers (Mayer *et al.* 1999), and there are self-report measures. We focus on the

self-report measures here, because, at present, there is more evidence linking self-reports to well-being. The ability-based measures are relatively new and may, in the future, also show clear links to well-being.

Alexithymia refers to people who have trouble identifying and describing emotions and who tend to minimize emotional experience and focus attention externally. This construct appears to be a mix of UEI and EEO. The Toronto Alexithymia Scale (TAS-20) is one of the most commonly used measures of alexithymia. It has been shown to be highly related to Bar-On's self-report EI measure (Taylor *et al.* 2000), and to be related to a number of important life outcomes. For example, people high in alexithymia are more prone to drug addiction, eating disorders, and to report medically unexplained symptoms ("somatization"; Taylor 2001). The alexithymia subscales – difficulty identifying and describing emotions – are related to a variety of negative indices of well-being (e.g. depression), even after controlling for other measures of emotional intelligence (Ciarrochi *et al.* 2003). A longitudinal study found that people high in alexithymia tend to misinterpret their bodily sensations as indicative of a physical ailment (Bach and Bach 1995). In a more recent study, Ciarrochi and Scott found that alexithymia predicted anxiety and low positive affect one year later, even after controlling for time 1 measures of affect (Ciarrochi and Scott 2004).

### *Defusing from unhelpful thoughts and emotions*

The third dimension of EI involves the ability to undermine fusion with unhelpful emotions and thoughts. Table 22.1 lists the key components of this skill. Defusion involves a fundamental shift in perspective. It involves looking *at* the sensations, thoughts, and memories ("private events") that show up from moment-to-moment. It helps people to experience these events as an unfolding, changing process of living, rather than as a fixed part of the self (Hayes 2002). For example, people can view their moods as equivalent to their "self" ("I am depressed"), or they can experience the mood, and the evaluation of the mood, as it is (e.g. I am labeling these unpleasant sensations as "depression," I am having the evaluation that "I am depressed"). Such context shifts help people to see their private experience for what it is – streams of thought, fleeting sensations – rather than what it says it is: fixed, facts, dangers that must be avoided (Hayes *et al.* 1999; Kabat-Zinn 1990).

Mindfulness of private experience is on the opposite side of "fusion." Essentially, mindfulness is hypothesized to help people to look at their private experience, rather than through it, and to see their moment to moment experience as it is (not as it seems to be when seen through language or intense emotion). Looking *at* experience can involve something like the following: "I notice that I am feeling angry and that I want to hit the person. But I won't do it, because I will get into all kinds of trouble." In contrast, looking *through* anger involves seeing the world through anger colored glasses. For example, when angry, one might

think: "This person is an enemy, a danger to me, and I have to destroy him." This fused viewpoint tends to make it less likely that the person will respond flexibly to the situation.

The last two decades have found substantial support for interventions, such as ACT, that are designed to increase mindfulness. There are now nearly two decades of work specifically supporting the efficacy of ACT. Published randomised control trials provide evidence that ACT does as well or better than traditional cognitive behavioural therapy in reducing depression and anxiety, and that it is effective in the treatment of substance abuse, pain, and psychosis (Hayes *et al.* 2002; Zettle 2003). ACT has also been shown to be effective at reducing stress and sick leave utilization in nonclinical populations (Bond and Bunce 2000; Dahl *et al.* 2004).

There is also substantial support for other mindfulness based interventions, including Dialectic Behavior Therapy (DBT) (Linehan 1993), Mindfulness Based Cognitive Therapy for Depression (Segal *et al.* 2002), mindfulness based meditation (Cormier and Cormier 1998), and Mindfulness Based Stress Reduction (Kabat-Zinn 1990). Many other approaches have benefited by adding mindfulness and acceptance components to their inventions (for a review see Hayes *et al.* 1998).

In addition to mindfulness, there are other Buddhist practices that might promote defusion. For example, in the Pāli Buddhist teachings, one is encouraged to analyze personal experience in terms of five aggregates. This involves looking at experience in terms of body, sensation, perception, mental formation or volition, and consciousness.

ACT also contains exercises that examine experience in terms of different elements (sensations, images, thoughts) (Hayes *et al.* 1999). The goal of analyzing experience into the five aggregates is "to create the wisdom of not self, to arrive at a way of experiencing the world which is not constructed upon and around the idea of a self, and to see personal experience in terms of processes and in terms of impersonal functions" (Santina 1984: 129). This act of analyzing experience in terms of different elements is a defusion move, in that it helps people to look *at* experience as an object, rather than to look *through their experience*. It hopefully helps them to experience thoughts and sensations as they are, namely, as constantly unfolding and changing processes, rather than as apparently discrete and unchanging "things," or as an essential part of the "self."

### *Defusing and direct experiencing: two sides of the same coin*

From an ACT perspective, language is a two-edged sword. It can be very useful, as when communicating dangers. However, it can also be problematic. Language allows us to transform stimuli, independent of experience. For example, if someone tells you, "John is a cancer in the organization," you may start to feel negative emotion towards John, even though you have had no experience with him.

Research has now documented how language, in particular verbal rules, can lead people to become insensitive to experience and, consequently, to become

inflexible (Hayes *et al.* 2001). The ACT solution to this problem involves helping people to distinguish between direct experience and verbal formulations produced by the "mind." For example, your verbal rules might tell you, "Avoid thinking about death, and you won't feel anxiety." ACT helps people to notice this verbal formulation (thereby initiating the process of defusion). Then it helps them to contact relevant experience. For example, the client might be asked, "Does avoidance reduce your anxiety?"

Using language to help people contact the "non-language" world (direct experience) can be tricky. How can one accomplish this? Both ACT and the koan practice of Zen Buddhism seem to deal with this problem in similar ways. That is, they communicate not through logic and reason, but rather through stories and metaphors. For example, Zen Koans are "stories and verses that present fundamental perspectives on life and no-life, the nature of the self, the relationship of the self to the earth and how these interweave" (Aitken 1990). Koans do not represent the private opinions of a single person, cannot be understood by logic, and cannot be measured by reason (Miura and Sasski 1966).

Metaphors are not simply logical arguments and are therefore not likely to provoke excessive verbalizing. Rather, metaphors are more like pictures. They can also be thought of as brief experiential exercises (Hayes *et al.* 1999). For example, consider the metaphor "Struggling in anxiety is the same as struggling in quicksand." This metaphor helps people to contact their experience of trying to get rid of anxiety and yet sinking deeper and deeper into it. Zen Koans can have a similar effect. For example, consider the famous Koan, "The Taste of Banzo's sword" (Reps and Senzaki 1998). Matajuro wanted to become a master swordsman. He asked the famous swordsman, Banzo, how long it will take to become a master swordsman if he works hard. Banzo replied, "Oh, maybe 10 years." Matajuro then asks, "If I work far more intensively, how long would it take me?" Banzo replies, "30 years." This story might help people contact the experience of how trying "harder" to achieve an outcome can make the outcome even more unattainable. For example, trying harder to get rid of anxiety can make anxiety worse.

The second part of this story/koan can be used to illustrate the importance of direct experience over verbal instruction. Banzo agreed to instruct Matajuro, but requested that Matajuro never speak of fencing and never touch a sword. Matajuro cooked for his master, washed dishes, made his bed, cleaned his yard, cared for the garden, all without a word of swordsmanship. After three years, Matajuro still labored on, but began to grow sad. He had learned nothing of swordsmanship. But one day Banzo crept up behind him and gave him a terrific blow with a wooden sword. The following day, when Matajuro was cooking rice, Banzo again sprang upon him unexpectedly. After that, day and night, Matajuro had to defend himself from unexpected thrusts. He learned so rapidly that he brought smiles to the face of his master (Reps and Senzaki 1998).

This story illustrates how the wise master avoids giving verbal instruction and encourages the student to learn via experience. Similarly, ACT theory suggests

that verbal instruction, and particularly verbal rules, often leads one to become insensitive to experience and inflexible. The story can illustrate to an ACT client that to get better at something, he/she might have to rely on painful experience for instruction.

In summary, ACT and certain aspects of Buddhist doctrine promote defusion and direct experiencing. The techniques include mindfulness training, analyzing experience in terms of different aggregates, and the use of metaphor and stories.

### *Individual differences in mindfulness and fusion with particular types of unhelpful thoughts*

There are several scales related to this EI dimension. The Mindfulness Attention Awareness Scale (MAAS) measures people's tendency to be mindful of moment to moment experience. This scale has been shown to relate to various aspects of well-being and to how effectively people deal with stressful life events (Brown and Ryan 2003).

The Demanding Perfection subscale of the Common Belief Survey (CBS-III; Thorpe *et al.* 2001) measures the extent that people tend to believe or fuse with unhelpful, demanding thoughts (e.g. People and things should turn out better than they do). This scale has been linked to poor mental health (Ciarrochi and West, in press).

Another group of measures reflects tendency to fuse with unhelpful beliefs about uncertainty (e.g. "that uncertainty is awful or intolerable"). These include measures of intolerance of uncertainty (Dugas *et al.* 1998), rigidity (Neuberg and Newson 1993), and intolerance of ambiguity (Frenkel-Brunswik 1949). These measures have been shown to relate to depression and anxiety in both clinical and normal populations (Dugas *et al.* 1998; Freeston *et al.* 1994).

Finally, individual differences in rumination seem to reflect the tendency to be fused with certain thoughts. Rumination can be assessed using self-reports measures such as the Emotion Control Questionnaire (Roger and Najarian 1989). Ruminators seem to be stuck in their thoughts, engaging in repetitive and passive thinking about a problem (Nolen-Hoeksema 1987). Rumination involves mindlessly bouncing from one negative thought to another, perhaps in an attempt to escape unpleasant affect by attempting to control the uncontrollable (e.g. uncertainty; Dugas *et al.* (1998). It has been associated with a range of emotional difficulties, including anger and depression (Nolen-Hoeksema *et al.* 1999; Rusting and Nolen-Hoeksema 1998). Longitudinal studies have established that people who engage in more rumination have higher levels of depressive symptoms over time and perceive themselves to be receiving less social support, even when controlling their baseline levels of depressive symptoms (Nolen-Hoeksema *et al.* 1994, 1999; Nolen-Hoeksema and Davis 1999). High rumination has also been associated with delayed recovery from stress, as indicated by delayed heart-rate and physiological (cortisol) recovery (Roger and Jamieson 1988; Roger and Najarian 1998).

### *Defusing from self-concepts*

The next aspect of EI involves the ability to defuse, at least briefly, from unhelpful self-concepts (see Table 22.1). The mind develops a concept of self and proceeds to evaluate it. It evaluates this "self" with terms such as "good," "bad," "kind," "flawed," "incomplete," "special," and/or "unethical." Cognitive fusion means we tend to treat these evaluations as literal properties of our self. For example, we can evaluate a cup as "bad," but this badness is not a property of the cup. Ceramic is a property of the cup. Similarly, badness or goodness cannot be a property of the self. It is merely a transient reaction. Everybody in the world can suddenly believe you are flawed, and you would still be exactly the same person. Everybody could believe you were perfect, and you would be the same person. Yet humans tend to confuse evaluations (I'm bad) with primary properties (I'm made up of about 70% water). If you believe badness was a primary property of your self, then it would be very difficult, if not impossible, to change (Ellis 2001; Hayes *et al.* 1999).

Problems arise when people come to identify with unhelpful self-concepts. The concept of "me" becomes equal to me. People are then drawn into protecting the concept of self as if it is part of the self (Hayes *et al.* 1999). They seek to feed it, or defend it against attack. People talk about "building self-esteem" or repairing "damage" done to it. They become "hurt" when someone "attacks" their self-esteem.

Low self-esteem seems to involve at least two parts: negative evaluations of the entire self ("I am worthless") and fusion with this evaluation. Thus, one could have the negative self-evaluation and not believe (fuse with) it. Undermining fusion with self-concepts is very different from "building self-esteem." Self-esteem is usually considered a "good thing" in many cultures, but it does have a major downside, namely, it requires one to believe that there is a single, unchanging, ratable self. This concept of self leads to many problems, as we will review later.

The goal of defusing is not to get rid of the negative evaluations and replace them with positive evaluations. Rather, it is to accept the negative self-evaluations as they inevitably show up, and to look *at* them, rather than *through* them. It is about doing what we value, despite these negative self-evaluations (see Wilson's chapter, this volume, for more discussion on fusion and values).

Buddhist teachings also recognize the illusion that there is a separate, permanent self, and see this illusion as a fundamental source of suffering. (Kapleau 1989; Ponlop 2004; Santina 1984). Many Buddhist mindfulness practices are designed to help discriminate between what we "actually are" from what our self-concepts "say" we are. For example, the concept of "my body" can be distinguished from the aggregate of body itself (Ponlop 2004). Meditation can help us to contact the actual body as a physical thing composed of various elements that are constantly in flux. Once we experience the actual body, we also contact the fleeting nature of our self-evaluations and the illusion of a permanent self. We may come to view the body in the same way as someone who wishes to

cross a river views a boat. It is immediately useful and beneficial, if properly used (Ponlop 2004).

> Upon finding the boat of human birth
> Now, cross the great river of suffering.
> O fool, there is not time for sleep, for
> This boat is hard to catch again
> (Śāntideva 1998)

### *Individual differences in fusing with unhelpful self-concepts and well-being*

Low self-esteem, as it is traditionally measured, appears to involve fusing with or believing unhelpful negative self-statements such as "All in all, I am inclined to feel like a failure" (Rosenberg 1965). It is well established that low self-esteem is associated with higher levels of negative affect (Blascovich and Tomaka 1991). Self-esteem is often measured using a self-report scale by Rosenberg (Rosenberg 1965). It also appears to be measured by the Bar-On emotional quotient inventory (Bar-On 1997).

From an ACT perspective, fusing with some positive self-concepts can also be unhelpful. Consistent with this view, some aspects of "defensive" high self-esteem have been associated with poor well-being, at least in some circumstances (Kernis *et al.* 1989; Rhodewalt 2001). For example, the Narcissist Personality Inventory (NPI) assesses a person's sense of grandiosity, self-importance, and specialness (Raskin and Terry 1988). Narcissists scan the social context for evidence that supports their elevated sense of self and tend to construct high self-esteem in the absence of objective evidence. Their self-esteem is fragile, and they are prone to respond to threatening feedback with shame, humiliation, anger, and interpersonal aggression (Rhodewalt and Eddings 2002).

A related line of research has examined individual differences in the stability of self-esteem. An unstable sense of self suggests that people are fusing with different self-concepts at different times. Stability can be measured by administering a standard self-esteem inventory at multiple times, and then using the variance between different measurements to predict outcomes (Kernis *et al.* 1989). People who have unstable high self-esteem have been shown to experience more anger and hostility, perhaps because they feel the "need" to defend their self-worth (Kernis *et al.* 1989). Other research shows that unstable self-esteem is associated with goal-related affect characterized by greater tenseness and less interest (Kernis *et al.* 2000).

### *Effective action orientation (EAO)*

EAO involves the ability to take value congruent action in the context of strong emotions and self-doubts and inconsistent feedback. It also involves the ability

to sustain this action even in the face of inconsistent feedback, frustration, and failure (see Table 22.1).

### *Measuring EAO*

There are a number of well-researched measures of people's self-control, or the ability of people to manage their lives, hold their tempers, keep their diets, fulfill their promises, stop after a couple of drinks, save money, persevere at work, and keep secrets (Tangney *et al*. 2004).

The *action-state orientation scale* measures people's ability to move from a desired goal state to some future goal state (action orientation) versus their tendency to engage in persistent, ruminative thoughts, which reduces the resources available for goal striving (Diefendorff *et al*. 2000). Strong action orientation is associated with lower levels of anxiety, depression, and rigidity, higher levels of positive attitudes, positive job-related positive behavior, and better performance in cognitive and athletic tasks (Diefendorff *et al.* 2000; Heckhausen and Strang 1988; Kuhl and Beckmann 1994).

The *self-control scale* is another measure of action orientation. Self-control purportedly involves the ability to "override or change one's inner responses, as well as to interrupt undesired behavioral tendencies and refrain from acting on them" (Tangney *et al.* 2004: 274). This conceptualization of self-control runs contrary to ACT/Mindfulness Based EI training, which suggests that one does not have to change one's inner responses to act effectively (Hayes *et al.* 1999). However, an examination of the self-control scale reveals that every single item focuses on behavior, rather than inner responses (e.g. "I do certain things that are bad for me, even if they are fun."). Thus, whilst the conceptualization is inconsistent with ACT, the scale is in fact consistent. Research has demonstrated the validity of this scale and shown that high self-control is related to higher grade point average, lower levels of anxiety and depression, less alcohol abuse, and better relationships (Tangney *et al.* 2004).

Self-control can be measured using behavioral tasks, as well as the self-report measures described earlier. Specifically, a substantial amount of developmental research has looked at children's ability to delay gratification in particular situations (Mischel *et al.* 1988; Shoda *et al.* 1990; Wulfert *et al.* 2002). For example, one study offered adolescents $7 immediate payment or $10 one week later (Wulfert *et al.* 2002). Compared to students who delayed gratification, those who chose the immediate fee showed more self-regulatory failures, such as greater use of drugs and greater academic underperformance. In another study, preschool children were offered the choice of one marshmallow immediately versus two at a later time. This task predicted performance ten years later. Specifically, it was found that the children who delayed gratification were more academically and socially competent and more able to deal well with frustration and stress (Mischel *et al.* 1988).

### *Connecting Buddhist practices to EAO*

One criticism that is sometimes leveled at Buddhism is that it promotes passivity and inaction. This could not be further from the truth. All of the EI dimensions discussed thus far are connected with Buddhist ideas and Buddhist practices. All of the dimensions underpin the ability to take effective action. We now consider each of the dimensions in turn and its relation to action.

People low in EEO (EI dimension 1) are constantly trying to escape themselves, in that they try to run away from their unpleasant feelings and thoughts. Such attempts to escape often fail, and make things worse. Importantly when people are busy "running" from themselves, they are often not moving in their valued direction. For example, a socially anxious person often wants to meet new people. However, if they have an ineffective emotional orientation, they may seek to control their anxiety by avoiding new people (the value incongruent direction). Many of the acceptance related practices in Buddhism may help people to stop running from themselves and, in doing so, create a space for valued action.

People with a poor emotional orientation often believe their emotions stop them from doing what they value. Consequently, they refuse to take valued action until they can get rid of the emotions. Some Buddhist practices might improve emotional orientation by demonstrating the interconnectedness of all things and encouraging a distrust of false oppositions (e.g. "this emotion is separate from and opposed to that action") (Hanh 1987). For example, socially anxious people may come to believe that "anxiety" and "meeting new people" are separate "parts," and that the bad parts (anxiety) block the good parts (meeting people) (Hayes *et al.* 1999). Buddhist practices can help people to see that in a particular moment, valued action and anxiety may co-occur and are part of the whole experience. Once people see that anxiety is not necessarily opposed to action, they realize that they do not have to avoid the anxiety (effective orientation). They can take action *and* feel anxious (EAO). Importantly, once they give up attempts to get rid of anxiety, they are ironically less likely to experience such anxiety.

The ability to use emotions as information (EI dimension 2) is also likely to be connected to values and effective action. For example, when we are anxious, we are often concerned that something undesirable (value inconsistent) will happen. Helping people to identify their emotions thus, indirectly, helps them to understand what they value. As we argued earlier, many of the Buddhist-related mindfulness practices are likely to improve people's ability to identify different aspects of emotions (e.g. sensations and thoughts). Once people become more mindful of their moment to moment experience, they may be in a better position to take effective action. They will not have to be "mindlessly" pushed around by their anxiety and anger. Rather, they can notice when these emotions show up, recognize the value connected to the emotions, and choose to move in a valued direction.

Finally, fusion with unhelpful thoughts, emotions, and self-concepts (EI dimensions 3 and 4) can act as a barrier to effective action. For example, one may fuse with (fully believe) the verbal sequence "I am useless." This self-evaluation can be

seen as a demon standing in the way of what we want. We may believe that we cannot do anything until we can make this self-evaluation go away. However, such self-evaluations can only be seen as barriers if they are treated as "real" or "facts." Buddhist mindfulness based practices help people to experience these evaluations for what they are, namely, fleeting sounds that come and go. Other Buddhist-related practices, such as koans and analyzing experience in terms of aggregates, might also help people to get perspective and see the evaluations for what they are (see defusion section). Once a self-evaluation is experienced as no more than a sound or fleeting sensation, it will not tend to act as a barrier to effective action.

One popular Buddhist metaphor is to liken the mind to a "tree full of chattering monkeys." To expand on this metaphor, any valued activity is likely to involve risk and thereby provoke the monkeys into chattering loudly. The monkeys say "you can't do that," "you'll never succeed," "you have to get rid of your anxiety before you can do anything," and "what if you fail?" All this chattering can drown out our ability to "hear" our values. We might find ourselves one day running around the tree trying to quite the monkeys. In the meantime, life is passing us by. Many Buddhist practices help us to hear the chattering as just chattering. Importantly, they help us to "hear" the values through all this noise, and in doing so, to choose the best course of action.

## Conclusions and future directions

It has taken science awhile, but it is finally starting to take the centuries old insights of Buddhism seriously. ACT provides a theoretical framework that explains how and when certain Buddhist practices are likely to be effective in reducing suffering and promote effectiveness. ACT thus helps bring certain aspects of Buddhist doctrine into the scientific realm, thereby undermining the notion that Buddhism is mere superstition or ritual. ACT also helps tie Buddhist practices to goal-directed behavior, which is likely to be appealing to achievement-minded people.

I have placed ACT into an EI/skills framework. The reason for this is that theoretically, I believe ACT in fact promotes EI (as defined earlier), and pragmatically, I have found that such a framework opens doors to organizations. People seem to unanimously prefer to attend something called "Emotional Intelligence Training" than "Acceptance and Commitment Training," though these may in fact be the same thing. The EI framework lets people know right from the beginning that we are teaching something quite different than normal intelligence, and that what we are focusing on is improving effectiveness (or intelligence).

This framework also helps to organize a substantial amount of individual difference research on emotional intelligence, and structure it in such a way that it can be linked to a coherent theory and to Buddhist practices. Previously, many of the measures reviewed here were treated in isolation. Research involving one measure rarely made reference to other, seemingly related measures. Researchers thus risked "rediscovering" what had already been found with the other measures. This

review will hopefully prompt researchers to look across research areas and to gain a better understanding of how their research fits in with the other research. The review also highlights the relevance of Buddhist practices to each of the research areas.

There is much left for future research. Academic psychology is just beginning to appreciate Buddhist insights. For example, Buddhists have developed a number of ways to help people see the fundamental interdependence of all things. Hanh (1987) has described several exercises under the title, "Contemplations of Interdependence," ACT theory suggests that such contemplations should undermine the believability of evaluations involving a separate "self" (e.g. "I am not good enough."). Research is needed to directly evaluate this hypothesis.

In closing, ACT practitioners, Emotional Intelligence Trainers, and Buddhists all attempt to relieve human suffering. My hope is that all these people will continue to work together to achieve this noble goal.

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# 23

# MINDFULNESS AND ENACTMENT IN PSYCHOANALYSIS

*Jeremy D. Safran*

Andrea has been seeing me in treatment for three years. She is an extremely attractive, professional woman in her early forties who has been divorced for six years. She initially consulted me because of her difficulty in establishing a satisfying long-term relationship with a man, and because of feeling stuck in her career. She has a characteristic pattern of becoming involved with men who are emotionally unavailable, and of having casual sexual relationships, which while satisfying at one level, leave her feeling exploited and empty at another. Her father is a rather passive, emotionally unavailable man, while her mother is more dominant, and expressive, but ultimately self-centered and narcissistic.

The men Andrea typically becomes involved with tend to be dominant, charming and emotionally expressive, but ultimately unavailable and often narcissistic and exploitative. In addition they are typically large, brawny men, who she describes as "manly." She perceives such men as having the capacity to look after her and protect her. Andrea's conflicts at work center around her difficulty in motivating herself to advance professionally, and a conflictual relationship with her boss – a man who is apparently overly demanding, unappreciative, self-centered and either unwilling or unable to provide the type of guidance and mentorship that she desperately wants from him.

In our very first session of work together, Andrea had demanded a formulation of her problem and systematic treatment plan from me. She wanted to know what our work together would look like, how I conceptualized the goals of treatment and how we would proceed towards them. Feeling flustered, pressured, and incapable of producing what she was asking for on the spot, I had managed to articulate some of these feelings to her, and to suggest that the intensity of her need might be interfering with the development of an organic process between us that would eventually lead to what she really needed. She seemed to find this exchange helpful. It made sense to her and seemed to provide her with a useful way of beginning to understand what might be going wrong in some of her other relationships.

Since this session, we have settled into a pattern of work together in which extended periods of relative harmony in our relationship – during which Andrea

seems to find our work together helpful – are punctuated periodically by sessions in which she once again demands something more substantial from me and accuses me of being withholding. At these times Andrea typically asks me to be more active and directive. She wants me to take more responsibility for determining how we will spend our sessions, to give her more advice, to give her more feedback and so. Or she may ask me to tell her how I conceptualize her problems, and to spell out how I think change will take place. At these times I attempted to explore the meaning of these requests for her and to understand what is being enacted between us and how each of us is contributing to the interaction. I also experiment with modifying my stance with her. In general, I think I am more active and directive with Andrea than I am with many patients, although I have no doubt that I can become quite withholding, withdrawn, and resentful when I am feeling pressured by her. This too is something that we talk about. So far we have managed to negotiate each of these crisis periods on our relationship productively and we continue to work together.

One of the most important changes that has taken place on the psychoanalytic tradition in the last two decades is a shift away from a view of the therapist as a neutral observer who can stand outside the relational field and observe his or her patients in an objective fashion, toward a view of the therapist as an engaged participant who is inevitably part of the phenomenon he or she is observing. In this perspective, the clinical vignette outlined earlier would be conceptualized as what is termed an enactment. Enactments are repetitive interactional patterns between patients and their therapists that reflect the unique personal histories, conflicts, and ways of relating to the world of both participants. A person's relational schemas (or generalized expectations about self – other interactions), shape his or her perception of the interpersonal world, and this leads to various plans, strategies and actions, which in turn pull for reactions that confirm his or her relational schema. For example, one who anticipates hostility, acts with preemptive hostility, which elicits the very hostility he or she anticipates. One who anticipates abandonment engages in various actions that will elicit the very abandonment he or she anticipates (e.g. clinging or counter dependency).

The particular response that a person's characteristic way of being will elicit in another, however, depends upon the unique characteristics of that other. For example, dominance may elicit submissiveness in one person, and anger in another. Aggression may elicit direct aggression in one person and passive aggressiveness in another. In contemporary psychoanalytic thinking, it is assumed that the characteristic interactional patterns that emerge between patients and their therapists will be similar in some respects to patterns that are characteristic of the patient outside therapy, and different in other ways. It is assumed that it is inevitable that patients and their therapists will become unconsciously embedded in interactional patterns that reflect the unique characteristics of both of them.

Obviously these interactional patterns or enactments can be tremendously destructive. They can obstruct therapeutic progress and potentially traumatize the

patient. At the same time, these enactments are seen as affording a tremendous opportunity for therapeutic change, if they are worked with in a constructive fashion. In the same way that all manifestations of the mind are harnessed towards the goal of insight in mindfulness training, working with therapeutic enactments in a self-reflective, or one might say, mindful way is considered the heart of psychoanalytic practice.

There are two reasons for this. First, working with patients to help them become aware of their contributions (both cognitive/affective and behavioral) to these inevitable therapeutic enactments helps them to develop the kind of mindfulness skills that will be useful for purposes of becoming aware of and deautomating their unconscious self-defeating patterns in relationships with other people. Second, to the extent that therapists are able to collaborate with their patients in a process of observing and disembedding from these enactments, patients are able to participate in a new type of relational experience with their therapists that can, over time, modify their maladaptive relational schemas or beliefs about self–other interactions.

A critical point to emphasize here is that the type of skills that therapists require to facilitate this type of collaborative exploration and disembedding process, are not technical skills in any narrowly defined sense. They are complex and multifaceted inner and interpersonal skills. In order to disembed from enactments, therapists require a basic capacity for self-acceptance (or an ability to work towards it), as well as the willingness and courage to face their own demons and to engage in an ongoing process of self-exploration and personal growth. They also require interpersonal sensitivity, perceptiveness, tact and the capacity to engage in a genuine dialogue with patients – one through which they are willing to challenge their own preconceptions about what is going on. Therapists caught in the grip of difficult enactments will inevitably experience difficult and painful feelings that they may have difficulty tolerating and allowing to emerge fully into awareness. The therapist who has an investment in seeing himself or herself as a magnanimous helper will have difficulty allowing aggressive or hateful feelings towards his patient fully into awareness. This natural tendency to dissociate feelings that are painful or threaten one's self-image leads people to act without awareness of the factors motivating their actions. This can make it extremely difficult for therapists to become aware of their own contributions to enactments and to begin to disembed from them. For example, a therapist can make an interpretation that on a conscious level is intended to help the patient, but at the same time is a reflection of his or her unconscious hostility. The patient will sense the hostility underlying the therapist's interpretation, even if the therapist himself is unaware of it and even if the patient is not able to put his or her experience into words. The therapist's state of mind will thus interfere both with his ability to see what is happening clearly and with the patient's ability to find anything of use in what therapist has to say. The relational meaning or nonverbal subtext of the intervention is as important or more important than the verbal information conveyed by it.

## The therapist's inner work

On the morning of the particular session that I am about to describe I had gone to work feeling vaguely under the weather because of a cold I was developing and also worn out and rather fragile because of a painful conflict I was in the midst of with a close friend of mine. Andrea was my first patient of the day and as she walked into my office that morning I found myself silently praying that this would not be one of our difficult sessions. She began the session by telling me that a friend of hers, who is a therapist, had suggested a therapy group for her to join and that she had made an appointment to interview the therapist who runs the group. I began to feel myself tensing up. Earlier in treatment, Andrea had asked me what I thought about the possibility of her joining a therapy group, and at that time we had explored the meaning of her considering this possibility in terms of our relationship. Part of what had emerged for Andrea from this exploration was a sense that participating in a therapy group might help her to feel that some of her needs were being taken care of elsewhere, thus making her feelings of frustration with our relationship more tolerable. We had explored the similarity between what was going on for her here, and her tendency to become romantically involved with more than one man at the same time. Ultimately Andrea had decided not to join a group, but to see what it would be like to attempt to work things out between the two of us without the emotional buffer that the group would provide.

Now she was not only introducing the possibility of the group again, she had already scheduled an interview with the therapist. I was feeling surprised and a little angry. My impression was that things had been going well between us. If Andrea was upset about something that had happened between us, why had she not spoken about it with me? How could she decide to interview a group without even raising the topic again with me? I tried to stay calm and to think of something useful to say. "I guess I'm kind of surprised," I found myself saying. "Surprised?" Andrea repeated with an icy edge to her voice. I heard myself stammering: "Well, I guess it seems kind of out of the blue. I mean, I know that we had talked about you joining a group at one point, but I thought that that idea was on the back burner, and that you were relatively happy with the way things were going between us." "How could you be surprised? How could you not know how frustrated I am?" replied Andrea. "Haven't I told you before?" "Well, yes," I sputtered. "What do I have to do to get through to you?" Andrea interrupted. "You refuse to respond to my needs." "That's not really fair," I thought, but before I could begin to mount a case for myself in my own mind, Andrea spoke again: "Anyways, if I start the group, I'll have to stop our work together. I won't be able to afford both."

Now I was paralyzed with intense and conflicting emotions. "How could she do this?" I thought. "After all we've been through together. All the times that I've tolerated her accusations of being cold and withholding, and tried to respond in an open nondefensive fashion. The various ways in which I *have* accommodated

to her needs. She thinks I'm cold and withholding. I wonder how she'd feel if she were working with a more traditional psychoanalyst?" "But maybe she *is* picking up on something about you," another voice in my head whispered. "She's not the first person to accuse you of being cold and withholding." For a moment I began to slide into a state of self-disparagement, but then quickly rallied to defend myself against my internal accuser. "The hell with it." I thought. "I've been good to her. I may not be perfect but I've really struggled to the best of my ability to help her." As I stepped back for a moment from my own internal drama, I watched my mind playing with various psychoanalytic concepts in an attempt to help me regain a sense of control. At the same time I felt mildly critical of my attempt to distance myself from my immediate experience by using concepts and formulations, and slightly amused at myself.

Eventually Andrea and I worked our way through this impasse as we had every time previously. Rather than focus on the details of how we did this, however, I want to keep the focus on my inner experience. I want to highlight my experience of internal paralysis and my difficulty sitting with and processing the range of conflicting feelings I was experiencing: shock, anger, righteous indignation, self-loathing, impotence, and so on. Over time I have become increasingly intrigued with the question of how therapists are able to work constructively with their own inner experience in a way that allows them to work constructively with therapeutic enactments. What exactly is the nature of the state of mind that permits therapists to relate to the feelings of rage, impotence, self-loathing, and despair that emerge during difficult enactments, without defining themselves by these feelings and without dissociating them? How do we enter into this state of mind and how can we begin to talk about the relevant internal processes in a meaningful fashion?

It has become customary in contemporary psychoanalytic writing to speak about the importance of the therapist's subjective presence and unconscious processes during complex and difficult enactments. At the same time a limited amount of attention is devoted to explicating and illustrating the processes through which therapists can work with their own internal experience to negotiate their way from a state of mind in which no possibilities for constructive therapeutic work exist to one in which internal space reopens and new possibilities emerge. At a broad level the relevant state of mind seems to have something to do with self-acceptance, with the ability to allow and accept one's internal experience, whatever it is, rather than fighting against it. This state of mind seems to involve a process of "letting go" and surrendering to one's experience, while at the same time reflecting on it in a nonjudgmental fashion. It involves cultivating the type of internal "spaciousness" that allows one's thoughts and feelings to emerge as they are, and to arise and pass without attachment, rather than attempting to rigidly control them.

This emphasis on the therapist's inner work has influenced our approach to training therapists in important ways (Safran and Muran 2000). For a number of years now we have been using mindfulness training, derived from the Buddhist

tradition, for purposes of helping therapists to cultivate the time of inner skill necessary to reopen internal space when it has collapsed. Mindfulness involves learning to direct one's attention in a nonjudgmental fashion in order to become aware of one's thoughts, feelings, fantasies, and actions as they emerge in the present moment. Mindfulness is a highly sophisticated method of self-exploration, which can be adapted in order to help therapists cultivate the stance of participant-observation (i.e. the ability to participate in the enactment while observing the nature of one's participation at the same time). It has important parallels with what Freud termed "evenly hovering attention" and the analyst, Richard Sterba referred to as "developing an observing ego." In contrast to the relatively sparse psychoanalytic literature detailing the process involved in cultivating this state of mind, however, the literature on mindfulness is vast, and there are numerous detailed and systematic technical treatises on how to develop and implement the skill of mindfulness, dating back as far as the third century BCE.

Mindfulness involves directing one's attention in order to become aware of one's thoughts, feelings, fantasies, or actions as they take place in the present moment. The goal of mindfulness is to become aware of and deautomate our habitual ways of structuring our experience through automatic psychological activities and actions. Mindfulness involves three components: (1) the direction of attention, (2) remembering, and (3) nonjudgmental awareness. The initial direction of attention involves intentionally paying attention to and observing one's inner experience or actions. This involves cultivating an attitude of intense curiosity about one's experience. In mindfulness meditation, the individual can initially cultivate the ability to attend by focusing the attention on an object (e.g. the breath) and then noting whenever his or her attention has wandered and returning it to the intended focus of attention. By noting whatever one's attention has wandered towards (e.g. a particular thought or feeling), before redirecting one's attention, the individual develops the ability to observe and investigate his or her experience from a detached perspective rather than to be fully immersed with it or identified with it.

The component of remembering plays a crucial role in allowing the individual to become aware of when he or she has lost the stance of the detached observer by becoming absorbed in a particular thought, feeling, or fantasy without awareness. It is anticipated that people's attention will constantly flit around from focus to focus, and that they will become lost in the objects of their attention (e.g. fantasies, memories, pleasant, and painful feelings) on an ongoing basis. Once again, the task is to periodically become aware of the object, thereby allowing it to dissolve and returning one's attention to a poised or evenly hovering position once again.

The component of nonjudgmental awareness plays a critical role in helping people to observe whatever emerges without pushing it out of awareness and without losing the stance of mindfulness, by getting caught up in an infinite spiral of self judgment. Although the suspension of critical judgment is considered essential, it is recognized that it is inevitable that the individual will at times feel

critical of his or her own experience or of others. The task is thus not to completely eliminate critical judgment, but to become aware of it as it emerges. This process of awareness then allows the judgment to dissolve, by making it fully conscious, thereby depriving it of its power and freeing up attention once again. *At the most fundamental level, what emerges as particularly critical to the stance of mindfulness is this attitude of acceptance*. Objects of attention can never be forcefully pushed out of awareness without creating an internal struggle that will only make them more powerful. Only the act of accepting awareness deprives the contents of the mind of their force.

An important byproduct of mindfulness practice is the discovery of *internal space*. This consists of a loosening of attachment to one's cognitive–affective processes – an ability to see them as constructions of the mind. This in turn reduces the experience of constriction resulting from over-identification with these processes and allows one to reflect on them and use them therapeutically. This experience is similar to what psychoanalytic theorists, such as Thomas Ogden (1986) and Glen Gabbard (1996), refer to as *analytic space*, that is the state of "double consciousness" that allows therapists to be "sucked into the patient's world while still maintaining their observing capacity" (Gabbard and Wilkinson 1994: 87).

There is a critical difference, however, between the goal of mindfulness practice in Buddhist meditation and mindfulness practice, as we have adapted it for psychoanalytic practice. In the Buddhist tradition, the ultimate goal of mindfulness practice is to come to realize that all phenomena, including the self, are empty of intrinsic existence. The specific contents of the mind are in a sense irrelevant. The task is to observe the various manifestations of the mind arising and passing, without becoming attached to them. In our adaptation of mindfulness practice there are two goals. The first is to help the therapist cultivate a greater sense of internal space by decreasing his or her attachment to any particular feeling, thought or fantasy. The second objective is to train therapists to refine their attentional skills for purposes of becoming aware of and making use of their inner experience as a potentially important source of information.

In what follows I will outline the way in which mindfulness practice can be integrated with a type of therapeutic dialogue between therapist and patient that allows them to collaboratively explore and disembed from therapeutic enactments. This dialogical process is referred to as metacommunication. Metacommunication consists of an attempt to step outside the relational cycle that is currently being enacted by treating it as the focus of collaborative exploration: that is, communicating about the communication that is taking place. This can be thought of as a type of *mindfulness in action*. It is an attempt to bring ongoing awareness to bear on the interaction between therapist and patient as it unfolds. Metacommunication attempts to decrease the degree of inference and is as much as possible grounded in the therapist's immediate experience of some aspect of the therapeutic relationship (either the therapist's own feelings or immediate perception of some aspect of the patient's actions). For example, the therapist may say, "I feel very cautious right now" or "I feel like it would be easy to say

something that would offend you." Self-disclosure plays an important role in metacommunication, but other forms of feedback are used as well. For example, the therapist may say, "I experience you as withdrawn right now" or "I have an image of the two of us fencing." The objective of statements of this type is to articulate one's implicit or intuitive sense of something that is taking place in the therapeutic relationship in order to initiate an explicit exploration of that which is being unwittingly enacted.

The therapist's task when engaging in this type of exploration is to identify his or her own feelings and use them as a point of departure for collaborative exploration. Different forms of exploration are possible. The therapist may provide the patient with feedback about his or her impact on others. For example: "I feel cautious with you . . . as if I'm walking on eggshells." Or "I feel like it's difficult to really make contact with you. On one hand, the things you're talking about really seem important. But on the other, there's a subtle level at which it's difficult for me to really feel you." Or "I feel judged by you." Such feedback can also pave the way for the exploration of the patient's inner experience. For example, the therapist can add: "Does this feedback make any sense to you? Do you have any awareness of judging me?" It is often useful for therapists to pinpoint specific instances of patients' eliciting actions. For example, "I feel dismissed or closed out by you, and I think it may be related the way in which you tend not to pause and reflect in a way that suggests you're really considering what I'm saying."

## Vignettes

In this section, I will provide two brief clinical vignettes illustrating the process of metacommunication. I will then spell out some of the underlying principles in a systematic fashion.

Roxanne was a graduate student in anthropology. There was something I found very likeable about her – something solid, mature, and open. She seemed to have a genuine desire to understand herself and to make use of our work. She began therapy because of her ambivalent feelings about her husband, whom she had been married to for two years. Although she cared deeply about him and felt he was a wonderful husband, she felt a lack of passion in their relationship and did not know whether she was ready to have children with him.

The first few months of therapy went very well. A therapeutic alliance was quickly established, and I found myself looking forward to her visits. I developed a sense that we were in tune with one another and in fact had noted to myself, with interest, that on more than one occasion, we seemed to be unconsciously swiveling our chairs back and forth in rhythm with one another, as if in reflection of our mutual attunement. As therapy proceeded, it gradually dawned upon me that I was no longer looking forward to our meetings to the same extent. Although I still found myself liking Roxanne and felt that she continued to work hard in treatment, I became aware of a subtle sense of flatness to these sessions. It was difficult to know what accounted for this sense, since on the face of things, therapy

was proceeding well, and there was nothing obvious to account for it. In an attempt to clarify what was going on, I eventually said to Roxanne, “You know, I’ve been trying to figure out what’s going on between us. It feels to me like there’s been a quality of flatness to our last few sessions. I think I’ve been kind of hesitant to bring it up, because of a reluctance to spoil things between us, and because I’ve had a sense of things going well between us, and of enjoying our time together.”

In response, she was able to acknowledge her own awareness of the flatness and a similar fear of doing anything that might spoil the relationship. This led to an exploration of the way in which she tended to present those aspects of herself to me that she believed were more admirable and likeable and had difficulty acknowledging and expressing discordant aspects of self-experience. This in turn led to an exploration of feelings of disappointment that after six months of treatment she was still feeling stuck in her relationship with her husband.

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Susan was a depressed woman in her early 20s, who was being treated concurrently with antidepressants. She had been treated successfully once before with antidepressants, but had experienced a relapse for no clearly identifiable psychological or environmental reasons. She was extremely ambivalent about being in psychotherapy, since she felt that this implied that she was to blame for her problems. On more than one occasion, she asked me whether I felt she should be on antidepressants, and I sensed that she was testing me to see if I was able to accept that her depression was biological and therefore beyond her control. I attempted to explore the meaning of her question with her and also to convey that I would support whatever she decided, but she seemed to regard any attempt to explore her experience as intrusive and any attempt to reassure her as hollow.

During exchanges of this type, I often felt cautious, constricted and, concerned about saying the wrong thing. On one occasion, the image that came to mind was of two people playing chess, and I said to her: “It feels to me as if we’re two chess players, carefully sizing one another up and trying to decide their next move. Do you know what I mean?” She acknowledged that the image fit for her as well, and I subsequently asked her what it felt like to be playing chess with him. This led to an exploration of her need to act with extreme caution in order to protect herself from me, and this in turn helped her to begin to explore her deep mistrust and feelings of vulnerability.

## Principles of metacommunication

Below are described a number of general principles underlying the skillful use of therapeutic metacommunication:

*1 Explore with skillful tentativeness and emphasize one’s own subjectivity*
Therapists should communicate observations in a tentative and exploratory fashion.

The message at both explicit and implicit levels should be one of inviting patients to engage in a collaborative attempt to understand what is taking place, rather than one of conveying information with objective status. It is also important to emphasize the subjectivity of one's perceptions since this encourages patients to use the therapist's observations as a stimulus for self-exploration rather than to react either positively or negatively as authoritative statements.

*2 Do not assume a parallel with other relationships* Therapists should be wary of prematurely attempting to establish a link between the configuration that is being enacted in the therapeutic relationship and other relationships in the patient's life. Attempts to make links of this type (while useful in some contexts) can be experienced by patients as blaming and can serve a defensive function for therapists. Instead the focus should be on exploring patients' internal experience and actions in a nuanced fashion, as they emerge in the here and now.

*3 Ground all formulations in awareness of one's own feelings and accept responsibility for one's own contributions* All observations and formulations should attempt to take into account what the therapist is feeling. Failure to do so increases the risk of a distorted understanding that is influenced by unconscious factors. It is critical to take responsibility for one's own contributions to the interaction. We are always unwittingly contributing to the interaction in ways we are unaware of and an important task consists of clarifying the nature of this contribution in an ongoing fashion. In some situations, the process of explicitly acknowledging responsibility for one's contributions to patients can be a particularly potent intervention. First, this process can help patients become aware of unconscious or semi-conscious feelings that they have difficulty articulating. For example, acknowledging that one has been critical can help patients to articulate their feelings of hurt and resentment. Second, by validating the patient's perceptions of the therapist's actions, the therapist can reduce his or her need for defensiveness.

*4 Start where you are* Collaborative exploration of the therapeutic relationship should take into account feelings, intuitions, and observations that are emerging for the therapist in the moment. What was true one session may not be true the next and what was true one moment may change the next. Two therapists will react differently to the same patient, and each therapist must begin by making use of his or her own unique experience. So for example, while a third party observer may be able to adopt an empathic response towards an aggressive patient, therapists cannot conceptually manipulate themselves into an empathic stance they don't feel. They must begin by fully accepting and working with their own feelings and subjective reactions.

*5 Focus on the concrete and specific and the here and now of the therapeutic relationship* Whenever possible, questions, observations, and comments should focus on concrete instances in the here and now rather than generalizations. This promotes experiential awareness rather than abstract, intellectualized speculation. For example, "I experience you as pulling away from me right now. Do you have any awareness of doing this?"

*6 Evaluate and explore patients' responses to interventions* Therapists should monitor the quality of patients' responsiveness to interventions on an ongoing basis. Does the patient use the therapist's intervention as a stimulus for further exploration? Does he or she respond in a minimal fashion without elaboration? Does he or she not respond? Does he or she respond in a defensive or self-justifying fashion? Does he or she agree too readily in what appears to be an attempt to be a "good" patient? It is important here for the therapist to attend to subtle intuitions about the quality of the patient's responsiveness. For example, a subtle quality of compliance may be difficult to operationalize, but the therapist may sense it nevertheless. The therapist may feel at some level that the patient has an ambivalent response to his or her intervention, even though he or she has difficulty articulating the relevant cues. If an intervention fails to deepen exploration or further inhibits it, or if the therapist senses something peculiar in the patient's response to it, it is critical to explore the way in which the patient experienced it. Did he or she experience the therapist's intervention as critical, blaming, or accusatory? Did he or she experience it as domineering, demanding, or manipulative? Over the time, this type of exploration can help to articulate the nature of the enactment taking place. It can help to articulate patients' characteristic way of construing interpersonal relationships and gradually lead to a fleshing out of their relational schemas. It can also lead to a progressive refinement in therapists' understanding of their own contribution to the interaction.

*7 Collaborative exploration of the therapeutic relationship and disembedding take place at the same time* It is not necessary for therapists to have a clear formulation prior to metacommunicating. In fact the process of thinking out loud about the interaction often helps the therapist to disembed from the configuration that is being enacted by putting into words subtle perceptions that might otherwise remain implicit. Moreover, the process of telling patients about an aspect of one's experience that one is in conflict over, can free the therapist up to see the situation more clearly.

*8 Remember that attempts to explore what is taking place in the therapeutic relationship can function as new cycles of an ongoing unconscious enactment* For example, the therapist articulates a growing intuition that the patient is withdrawing and says: "It feels to me like I'm trying to pull teeth." In response the patient withdraws further and an intensification of an interpersonal dance ensues in which the therapist escalates his attempts to break through and the patient becomes more defended. It is critical to track the quality of patients' responsiveness to all interventions and to explore their experience of interventions that have not been facilitative. Does the intervention deepen the patient's self-exploration or lead to defensiveness or compliance? The process of exploring the way in which patients experience interventions that are not facilitative helps to refine the understanding of the unconscious interpersonal dance that is taking place.

## *Clinical illustration*

The following dialogue illustrates the process of metacommunication in a more detailed way. It is taken from an early session with a desperate and aggressively

demanding patient named Silvia. A commentary on the dialogue is provided in italics.

THERAPIST: So Um . . . this is our second session together, and I'm wondering you're feeling, and whether you have any thoughts or questions after our last session.

SILVIA: I'm not very happy. I'm very frustrated with you, actually. Last time, I came in here, just sat here and I talked and talked and talked. And nothing, absolutely nothing. You sat there, the way you're sitting there now, and you didn't really say much of anything, and I – it's angering me because if I'm supposed to come – if I'm going to therapy, if I'm going here and I'm doing this, I want an answer. I can't just talk and talk and talk and have you say things that lead me in abstract way. How is this gonna work? I need to know from you how is thing going to work? I need a concrete answer. How do I get from where I am now, to somewhere else? I need a way to go. I . . . don't know how to go. I've been in therapy for two years, and nothing seems to be helping. And you're not helping either. So, it's like, what do I do?

THERAPIST: Ok, so you know, I'm hearing that you're not that happy about our last session and that you're feeling frustrated and also, if I understand correctly, that you'd like to hear more from me as to what, – about how the therapy works . . . .

SILVIA: How do you do work? How do you do what you do? How is this supposed to help me? How do I fix what's going on?

THERAPIST: Ok, I'll try to answer that . . . But before I say anything, I want to say that I have some concern about whether or not whatever I'm going to say is what you're really wanting. But I'll do my best, Ok . . . You have a funny look on your face . . .

SILVIA: I'm not sure why you're concerned about that. Isn't that your job? To tell me how things are supposed to go . . . I'm confused then.

*Silvia begins the session by expressing her anger and frustration with the way things have been going and by pressuring the therapist to provide her with an explanation of how therapy is going to help her. The therapist metacommunicates his concern that it is going to be difficult to satisfy her, and then picking up on her exasperated look, begins to explore her reaction to his metacommunication.*

THERAPIST: Yeah, I mean it is my job to do my best to help you and to try to answer your questions, yeah, but there is something about . . . it's a bit difficult for me to put in words . . . but something about the intensity with which you're asking for things which makes me a little bit . . . which leads me to question my ability to give you the answer you're wanting. But I'll try . . . Ok? Basically as I see it, the way in which therapy works is that the two of us will work together to explore things that you may be doing in relationships with other people that may be self-defeating that you may not be completely aware

of . . . ways that you may see things that are self defeating or ways in which you are dealing with your feelings that are self-defeating, or ways in which you're . . . you're shaking your head . . .

SILVIA: . . . . I'm not defeating myself. I don't defeat myself. I don't understand how coming in here and working on it together is gonna help. Aren't I – isn't it supposed to be that I say what's going on and you tell me an answer – give me an answer? Isn't that the way it usually works? You ask a question you get an answer. I don't understand what you're trying to do that would help. I don't think I'm defeating myself.

THERAPIST: Um-hm.

SILVIA: I don't think I'm defeating myself at all.

THERAPIST: Um-hm.

SILVIA: I think I come in here for answers and you're not giving them to me.

THERAPIST: Um-hm. I'll certainly give you answers to the extent that I have them. But also some of it will have to come out of the two of us really exploring things together.

SILVIA: Yeah, that's too abstract for me. I need something in the concrete. I need to know how to get from point A to point B.

THERAPIST: Um-hum.

SILVIA: And if I'm just gonna sit here and get this abstract stuff . . . it's kind of wasting my time, isn't it? It's kind of a waste of my time. That's what the past two years have been with other people. It's just a waste of my time if I just sit and get things in the abstract.

THERAPIST: Uh hum, yeah, you know I'm trying to think if there is any way that I can be more concrete than I am right now. Um, let me . . . let me give you an example, Ok?

SILVIA: Ok, that's concrete.

THERAPIST: Even right now, let's try to take a look at what's going on between the two of us. You obviously, you want an answer, and I understand that you want an answer, and I want to give you what you need. But I think there is something about the – just to try to understand what's going on for me – there's something about the intensity with which you're asking . . . the pressure where I'm supposed to produce something, that makes it difficult for me to . . .

SILVIA: Isn't that your job? To produce something . . . to give me an answer? Isn't that your job?

THERAPIST: Well my job is to help you. But there's something about what's going on between the two of us right now that's making it difficult for me to really give you what you're wanting or needing.

SILVIA: Aren't you asking me to perform too? Aren't you asking me to give you stuff too?

THERAPIST: Tell me more about that. Does it seem . . . ?

SILVIA: Aren't you asking me to give you what's going on with me and articulate what's going on with me? So I'm being asked to perform too? Aren't I?

THERAPIST: I'm wondering if you felt criticized by what I said just now.

SILVIA: Of course I did. I felt like you're blaming me. Like I came in here and I was trying to say how I felt and, trying to say what I wanted from you . . . and needed from you and it comes right back at me.

THERAPIST: Ok . . . I need to think about that a little bit. I don't think it was my intention to blame you . . . but maybe there was a way in which I was responding out of feeling pressured, and maybe feeling . . . feeling a little bit blamed for not giving you what you want. So that in turn I was kind of blaming you. So it's kind of like passing a hot potato back and forth. You know . . . like you're saying "I'm not doing my job," and I'm saying "you're not doing your job." Does that make any sense to you?

SILVIA: Yeah a little, yeah.

THERAPIST: Ok . . . so if that is what's going on between the two of us . . . then . . . I'm not exactly sure how we're going get past this . . . but I think the two of us being able to agree that that is what's going on is a start . . . right? And, I'm willing to work with you in order to help the two of us find a way to get past this point. Right? And my sense is that would be an important first step for us. Ok?

SILVIA: Ok, yeah, ok.

THERAPIST: Ok.

*Even though the therapist suspects that any attempt to provide an answer to her question is doomed to failure, he attempts to provide a short rationale, on the assumption, that not to do so will be experienced as an aggressive act and will exacerbate the situation even further. As expected, Silvia does not find his answer helpful, and continues to express her anger and frustration and pressure him for a response. The therapist attempts to metacommunicate again by putting into words the way in which the pressure he feels coming from her makes it even more difficult for him to come up with something that will feel helpful to her. When Silvia suggests that she feels pressured to perform as well, the therapist suspects that she has experienced his metacommunication as an accusation. Monitoring and exploring the patient's experience of the therapist's intervention is a key principle of metacommunication. In response to the therapist's probe, Silvia is able to acknowledge feeling blamed. This helps the therapist to begin disembedding from the enactment. He thinks out loud about what his intentions are and is able to acknowledge that perhaps he has been responding defensively to a feeling of being attacked. He frames things in terms of vicious cycle they are both caught in: "You're saying, I'm not doing my job, and I'm saying you're not doing our job." At this point, Silvia begins to soften. The beginning of alliance is established around the goal of working together to find their way out of this enactment.*

## The therapist's state of mind as an instrument of change

Increasingly, I have come to believe that when metacommunation enables the therapist and patient to disembed from an enactment, it does so, not just because

the therapist has found the right words, but because the words reflect the fact that the therapist has managed to enter into the right state of mind. Moreover, I have come to believe that one of the primary functions of metacommunicating about the therapeutic relationship is to help the therapist enter into this state of mind, by putting into words that which feels unspeakable (Safran and Muran 2000).

But to speak about it as the "therapist's state of mind" is somewhat misleading. A more accurate phrase would be "the therapist's embodied state of being." The mind is embodied and the patient–therapist interaction, like all other human interactions involve a process of mutual influence and regulation at a bodily felt level. The heart of the therapeutic process involves affective communication at both conscious and unconscious levels (Safran and Muran 2000).

In order to understand the significance of this point, it is worth taking a brief detour into the realm of emotion theory and research. There is a movement afoot in diverse therapeutic traditions to develop a comprehensive motivational theory grounded in contemporary emotion theory and research (e.g. Greenberg and Safran 1987; Jones 1995; Lichtenberg 1989; Safran and Greenberg 1991; Spezzano 1993). Central to this theory is the notion that emotions are biologically wired into the human organism through an evolutionary process and that they play an adaptive role in the survival of the species. Emotions function to safeguard the concerns of the organism (Ekman and Davidson 1994; Frijda 1986; Spezzano 1993). Some of these concerns or goals are biologically programmed (e.g. attachment), while others are learned. Emotions are conceptualized as a form of action disposition information. They provide us with internal feedback about the actions that we are prepared to engage in. They provide us with information about the self as a biological organism, with a particular history, in interaction with the environment. As such, they are at the core of subjective and intersubjective meaning.

It is useful to understand the structure underlying the fundamental sequences of social behavior in terms of motivational systems that have been wired into the human species through a process of natural selection. Examples include attachment, exploration, sexual excitement, flight and aggression (e.g. Bowlby 1988; Jones 1995; Spezzano 1993). Emotions function as the subjective readout (or experiential monitor) of which motivational systems or combinations of them are dominant at any given time. These systems become activated in response to the appraisal (which is typically only partially conscious) of various environmental contingencies. For example, anger occurs in response to events experienced as an assault or violation. It informs the individual of his or her organismic preparedness to engage in self-protective behavior. Sadness occurs in response to a loss and organismically prepares one to recover or compensate for what is lost. Fear is evoked by events appraised as dangerous and informs individuals of an organismic preparedness for flight. Emotions can thus be thought of as a type of embodied knowledge.

While emotion provides the individual with a monitor of his or her own action dispositions, the expressive-motor behaviors associated with it provide others

with an ongoing readout of these same action dispositions. While this process of reading the other's affective displays can have a conscious element to it, a good deal of it takes place out of awareness, in the same way that other affective appraisals take place. Thus, for example, we may unconsciously appraise the other's aggressive disposition towards us, and in turn feel angry (i.e. be prepared to reciprocate with aggression), without being fully aware of either our own readiness to be aggressive or the cues to which we are responding. Moreover, we may be unconsciously responding to an action disposition that the other may be unaware of. As Parkinson suggests in his review of the literature on affective communication,

> Moment-by-moment reactions to another person's displays are not mediated by any conscious emotional conclusions about what these expressions signify but rather are part of one's skilled and automatized engagement in interpersonal life, and one's ecological attunement to the unfolding dynamic aspects of the situation.
>
> (1995: 279)

Healthy functioning involves the integration of affective information with higher level cognitive processing in order to act in a fashion which is grounded in organismically based need, but not bound by reflexive action (Greenberg and Safran 1987; Leventhal 1984; Safran and Greenberg 1991). Thus, for example, an individual may be aware of his anger at someone, but deem it unwise to respond aggressively. Individuals who have difficulty accessing the full range of their emotional experience, however, will be deprived of important information. They may suppress or fail to mobilize a motivational system that may be adaptive in specific context. For example, the individual who has difficulty experiencing anger may fail to mobilize adaptive aggression. The individual who has difficulty experiencing more vulnerable feelings may fail to fulfill healthy needs for nurturance. A second consequence of the process of dissociating emotional experience is that there may be an incongruence between one's actions and subjective experience. Since the activation of a motivational system is not dependent on the conscious experience of the associated emotion, it is not uncommon for people to have only partial awareness of the impact they have on others. Thus, for example, the individual who dissociates feelings of anger may nevertheless act aggressively and evoke aggression in response. This type of incongruent communication can play a major role in psychopathology and in the type of therapeutic enactments discussed previously.

There is growing evidence that a range of different forms of psychopathology involve deficits in the capacity for affect regulation (Schore 2003). Affect regulation involves tolerating, modulating, and making constructive use of a range of different affective states, including those that are intensely painful or pleasurable, without needing to dissociate them. People initially develop the capacity for affect regulation through their interactions with their attachment figures. As infant

researchers have shown, there is an ongoing process of mutual affective regulation between mothers and infants through which both partners influence each other's affective states (Beebe and Lachman 2002; Tronick 1989). In a healthy developmental process, there is an optimal balance between interaction and self-regulation. There are periods when the mother and infant are affectively coordinated with one another and periods when they are not. When this process becomes derailed there is an excess of one of the two types of affect regulation (i.e. either an excess of interactive regulation or an excess of self-regulation). Thus, for example, the mother who is excessively dependent on emotional contact with her infant will pursue eye contact with him in an attempt to elicit a smile even after he has averted her gaze. Or alternatively, the child who learns that parents respond to her own painful feelings (e.g. anxiety, anger) with catastrophic responses of their own (e.g. panicking or becoming excessively angry), will learn to attempt to regulate her feelings on her own. Without having the experience of learning that these feelings are tolerable within the relationship, however, he or she will never develop the capacity to self-regulate in a healthy fashion, and will never learn to be able to use relationships in a healthy fashion to help regulate painful or distressing feelings.

In treatment, therapists' ability to resonate with their patients' more painful emotions and to tolerate the intensely painful and frightening emotions that can be evoked in them during enactments, can be transformative for patients in and of itself. This type of containment (to use the psychoanalyst, Wilfred Bion's term), in which therapists process emotions evoked in them by patients in a nondefensive way, can be a powerful way of helping them to learn that relationships will not necessarily be destroyed by painful, aggressive, or potentially divisive feelings and that they themselves can survive these feelings. In order to be able to provide this type of affect regulation or containment for the patient, however, the therapist requires the capacity to regulate his or her own difficult or painful feelings in a constructive fashion. Psychoanalysts have always maintained that the therapist's capacity to manage difficult feelings evoked in them during the treatment (what are referred to as countertransference feelings) is a critical therapeutic skill. It has been assumed that one develops this capacity through undergoing one's own personal treatment. And to the extent that the capacity for affect regulation develops as a result of healthy developmental experiences, this seems reasonable. It has been my experience, however, that the cultivation of an ongoing mindfulness practice play an extremely valuable role in helping therapists to further refine this capacity.

It is also important to emphasize that while in many cases the process of metacommunication serves the dual functions of both helping to disembed from an enactment and helping the therapist enter into a therapeutic state of mind, there are some cases in which any attempt to metacommunicate only leads to an intensification of a toxic cycle that is being enacted. One patient may experience the therapist's attempt to metacommunicate as a form of narcissistic self-absorption. Another one may experience it as a form of persecution. A third one may experience

it as impinging or intrusive. In such cases it is critical for therapists to have the capacity to work with their own difficult feelings in a constructive fashion, without explicitly exploring what is being enacted in the therapeutic relationship. And here as well, mindfulness practice can prove invaluable.

## Conclusion

Although there was a flurry of interest by psychoanalysts in Buddhism during the 1950s and 1960s this interest to some extent went underground until recent years. In the last decade, however, the dialogue between these two traditions has accelerated at a rapid pace. Both psychoanalysis and Buddhism are systems of healing or wisdom traditions that have evolved over time as they have been assimilated by new cultures. And both have transformed the cultures that have assimilated them. Today's psychoanalysis is very different from Freud's psychoanalysis, and American psychoanalysis is very different from French psychoanalysis. Indian Buddhism underwent important transformations as it was assimilated by other Asian cultures and synthesized with indigenous traditions such as Taoism in China or Bon in Tibet. And in turn it transformed these cultures. The ongoing dialogue between psychoanalysis and Buddhism offers potential for enriching both traditions. Through this dialogue, Buddhism will inevitably be transformed just as it was when it spread beyond India to other Asian cultures. And psychoanalysis will be transformed just as it was when it spread beyond its culture of origin in *fin de siecle* Vienna (Safran 2003). The approach described in this chapter provides one example of this transformative process in its early stages.

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# 24

# CONTRIBUTIONS OF MODERN PSYCHOLOGICAL METHODS TO THE ATTAINMENT OF BUDDHIST GOALS

*Marvin Levine*

## Introduction

Starting about 100 years ago, the methods of Western science, which when applied to inanimate nature had produced such stunning accomplishments, began to be used in the study of human behavior (see Boring 1950, chapters 14–21). This intense and rigorous focus on human functioning produced several noteworthy successes in alleviating distress and promoting well-being. Since such results are directly relevant to Buddhist aims, Buddhists may find it of value to review the particular methods employed to produce such results.

First, it will be useful to characterize the similarities between Western Psychology and Buddhism. Elsewhere (Levine 2000) I suggested that the two disciplines overlap in several ways. Here is a summary.

Both Buddhists and Western psychologists

1 Are concerned with alleviating inner pain, turmoil, affliction, in a word, suffering.
2 Are humanistic and naturalistic, in that they focus on the human condition and interpret it in natural terms. Just as the Buddha described human nature as consisting solely of psychological aggregates, so do Western psychologists deal only with psychological processes. Concepts like "soul" or "divine influence" are not considered.
3 View the human being as caught in a causal framework, in a matrix of forces. Manifestations of these forces are habits of thinking, as well as cravings or drives, produced by both our biology and our beliefs.
4 Teach the appropriateness of compassion, concern, unconditional positive regard towards others.

5 Share the ideal of maturing, of growth. This is interpreted by both East and West as greater self-possession, diminished cravings and agitations, less impulsivity, greater equanimity to privation and to loss.
6 Acknowledge that the mind functions both at a more superficial and at a deeper level. An anterior (deeper) part of ourselves can observe our own mental functioning, giving rise to mindfulness and to meta-cognition. This deeper observation permits monitoring and changing our thoughts and our emotional states.

The congeniality of Eastern and Western views is seen in another form. Western researchers have comfortably incorporated Eastern techniques into their research programs. Several such programs have been welcomed and widely publicized. These include the work of Benson (1975, 1987) in the study of physical and psychological well-being, of Csikszentmihalyi (1990) in the study of creativity, and of Levine (1994) in the analysis of problem-solving. Also, Western researchers are now investigating the physiology of meditative states (Davidson 2002; O'Connell and Alexander 1994). Furthermore, as several articles in this volume will attest, psychotherapists have started to include meditation, mindfulness practice, and yoga exercises in their work with clients.

This chapter is somewhat different from the others in this volume that relate Buddhism to Western Psychology. Those others portray a relationship that may be characterized as *unidirectional*, the direction being from Buddhism to psychotherapy. They describe ways that Buddhist methods can supplement the methods of Western psychotherapy. In this chapter, I propose to go in the reverse direction, to describe various methods in Western Psychology that may be useful for the attainment of Buddhist goals.

First, let me be explicit about my understanding of these goals. The Buddhist aims on which I will be focusing are those expressed in the Four Noble Truths. Tradition holds that this was the content of the Buddha's first sermon. While Buddhist sects may vary in their approach to enlightenment (whether it is to be attained rapidly, through a sudden insight, or gradually, or through faith) they all subscribe to the view that Buddhism at its core is concerned with the nature of suffering, the causes of suffering, and the practices that lead to the liberation from suffering. In discussing Buddhist aims, I will stay close to the Four Noble Truths, in particular to the "gradualist" implication inherent in the Noble Eightfold Path which is the Fourth Noble Truth.

The ultimate goal is, then, liberation from *dukkha*, from suffering. This final condition has, of necessity, preliminary goals. The chief and preliminary goal is self-transformation, the overcoming of lusts, angers, fears, prejudices, eliminating, in short, all the sources of mental affliction. In order to attain this sub-goal of self-transformation one must fulfill still two more prior goals:

1 *Facilitating awareness*: One sees this sub-goal in the discourse on the Establishing of Mindfulness, the Satipaṭṭhāna Sutta (MN.1. 55 ff.), which stresses awareness of the body (*Kāyānupassanā*), feelings (*Vedanānupassanā*),

and thoughts (*Cittānupassanā*), and meditation on *dukkha*, which is to say on the First Noble Truth (*Dhammānupassanā*). These practices direct the disciple to the awareness of one's own nature, of sentient nature in general, and of the human condition. Such awareness is accompanied by a greater sense of compassion (*karuṇā*).

2 *Diminishing the passions*: This aim is described as the Extinction of Thirsts (*Taṇhākhaya*) and is embodied in the Third Noble Truth. One must work to diminish one's angers, fears, agitations, cravings, so that they no longer dominate experience and behavior. One seeks to achieve a condition of greater patience and of equanimity.

The practices of Right Views, Right Thoughts, Right Mindfulness, and Right Concentration – indeed, the Noble Eightfold Path generally – serve both of these aims.

Modern psychology also has among its aims, although in a more modest form, both of these goals. It seeks to help people become both more mindful and less needy and agitated. My purpose here is to describe some of the methods employed for attaining these two general goals. Since each one requires different methods, each will be considered separately.

### ***Facilitating awareness***

#### *Insight therapy*

The most common technique is referred to as insight therapy, or more colloquially, the talking cure. It involves two people, a client and a therapist. The latter is analogous, in Eastern terms, to a guru or senior monk. Like those sages, the therapist is skillfully mindful and is well along the path of self-transformation. Client and therapist typically meet for hourly sessions once or twice a week. In its simplest form, traditionally known as non-directive therapy (Rogers 1951), the clients simply unburden themselves; the therapist does the minimum of interpretation or interference. During the therapy session the client is free to reveal any thought or feeling, no matter how gross, shameful, or hostile. The therapist is non-judgmental. Even when the client is rude and insults the therapist, that worthy listens patiently to such expressions, and encourages the client to explore the source of such hostile behavior. As many case studies demonstrate, this free expression of thoughts and feelings leads clients to know more about their innermost cravings, values, and needs. It serves as a kind of externalized mindfulness practice.

This method, in which the client speaks openly without fear of criticism or judgment, came into use as a therapeutic technique about 100 years ago. The method and its benefits, however, were first described earlier by Nathanial Hawthorne (1850: 124, 1969 edn):

> If the physician possess native sagacity, and a nameless something more, let us call it intuition: if he show no intrusive egotism nor disagreeably

> prominent characteristics of his own: if he have the power, which must be born with him, to bring his mind into such affinity with his patient's that this last shall unawares have spoken what he imagines himself only to have thought: if such revelations be received without tumult, and acknowledged not so often by an unuttered sympathy as by silence, an inarticulate breath, and here and there a word, to indicate that all is understood: if to these qualifications of a confidant be joined the advantages afforded by his recognized character as a physician; then, at some inevitable moment, will the soul of the sufferer be dissolved and flow forth in a dark but transparent stream, bringing all its mysteries into the daylight.

The premise of this method, in short, is that by self-exploration and revelation in the presence of a sympathetic, non-judgmental, and authoritative individual, the client deepens his or her self-understanding. By experiencing the most subtle cravings, fears, and angers, the client brings these "mysteries into the daylight."

The importance of this process is readily seen in a conversation I had about anger with a psychoanalyst. I was describing the Buddhist view that anger is a source of suffering, that we are infinitely malleable, and that we can confidently strive to diminish anger in all its forms. She commented "You know, I can't use any of this with most of my clients. Their problem is to learn to feel their anger, to acknowledge it, and to label it." She was saying, in other words, that the clients first had to become mindful of their angers and hostilities. The self-exploring procedure that takes place in psychotherapy accomplishes just that.

### *Cognitive therapy*

In recent years insight therapy as just described has been modified by some psychotherapists to include more direct intervention. Several psychologists, who characterize themselves as cognitive therapists, emphasize that the client's suffering is frequently caused by various subtle habits of thought, or attitudes. The therapist helps the client become aware of and change these habits of thinking. Here are two examples:

1 Albert Ellis (Ellis 1973; Ellis and Harper 1977) proposed that people can have strange attitudes, without any awareness of just how strange and pain-producing these are. Common among these attitudes are: "I must be perfect." "I must be approved of by everyone." "I must be successful at everything I do." Of course, people typically are not aware that they hold these views. But the clients manifest them in their speech and behavior. In the course of describing their suffering to the therapist, clients may say things like:

   "*I must* get 'A's' in my courses. *It will be terrible* if I don't get into medical school."

"*It's awful* how my roommate puts on airs and acts superior to me. *I can't stand it.*"
"*I should never* have disappointed my parents. *I can't face them* now."

The attitudes revealed by these statements have two facets. First, they reflect *Taṇhā*, urgent cravings, whose frustration is causing suffering. Thus, the first example indicates intense attachment to grades and success; the next examples reveal urgent ego needs that are being frustrated (i.e. the clients suffer when other people – a roommate, parents – make them feel inferior). In addition, these statements manifest an excessively troubled reaction. Setbacks and insults are not merely unpleasant or even annoying but are "awful," "terrible," "intolerable." Ellis sums up this kind of reaction with one word. The clients, he notes, *catastrophize*. Any setback or frustration, no matter how minor, is "horrible," a "catastrophe." When, during self-exploration, if the clients manifest any of these views, Ellis calls it to their attention. He then challenges the client to question its validity. A university freshman, in a counseling session expresses anguish over receiving C's in a couple of his courses. It is "terrible." He can't bring himself to tell his parents and he will be embarrassed when his friends find out. The therapist will explore with him why he finds it so awful. "OK, you are getting a 'C' in a course. So what if people are disappointed? Why is that so 'terrible?' "

In this way the therapist helps the client revise his view of the seeming horror of disappointing others; the imagined disappointment becomes less traumatic, less a source of suffering. With enough such examples the client begins to recognize the pattern of catastrophizing in his thinking. This recognition, in turn, permits him to become aware of these deep-rooted, excessively strong needs, whose frustration is causing him so much pain. He is now able to start on the task of diminishing these needs.

2 Martin Seligman (1991) similarly demonstrated how habits of thinking can contribute to suffering. He described an attitude of *pessimism*, where the pessimist responds to setbacks by thinking in sweeping generalizations ("This *always* happens to me"; "I *never* have any luck"; "I'm no good at *anything*"; "*Nothing* will help"). Seligman analyzes the negative thoughts into three forms: permanence ("I'll *never* amount to anything"), pervasiveness ("*Everything* is always going wrong"), and personal indictment ("*I'm* a *terrible* mother").

Seligman characterized the opposite kind of thinking as *optimism*. The optimistic thinker focuses on the particular situation, sees it as a problem to be dealt with, and is aware of external contributions to the event. Consider, for example, a college sophomore receiving his first failing grade on an exam. A pessimistic response is: "I just can't do this work" (permanent); "I'm always doing a terrible job" (pervasive); "I'm not good enough for this school" (personal). By contrast, an optimistic response is: "This is the first time I've failed an exam" (limited in time); "I'll talk to the professor to find out what I can do to improve" (focused,

solution oriented); "I shouldn't have let Bill pull me away from studying last night" (externals considered).

Seligman has demonstrated that pessimistic thinkers tend to be less successful in careers, and to be in poorer physical health. They also are more likely to become depressed. His treatment for depression begins by helping the clients become aware of their negative style of thought. Only by becoming aware can the client then start the work of changing from the wrong to the right habits of thinking.

Thus, cognitive therapists describe habits of thought that are sources of suffering. The therapist supplements the clients' traditional self-exploration by making them aware of these specific habits. The clients are then guided toward a more appropriate, less troubling mode of thought. In this sense, these therapists do more than help the clients become aware. They also help change their way of thinking. They help the clients go from wrong thinking to what might be characterized as one form of Right Thoughts.

### *Diminishing the passions and dealing with excessive fears*

In the second half of the twentieth century, there arose a movement known as behavior therapy (see, for example, Spiegler and Guevremont 1993). Instead of attempting to facilitate general awareness, the therapist deals with the client's specific form of suffering. An early clear success with this approach was on alleviating fears. A client may report that he has a specific fear, a phobia, which interferes with his life. The specific fear may be, for example, of cats, or of public speaking, or of flying. The therapist works with the client to gradually diminish and even eliminate the fear. The method used is known as *systematic desensitization*. The feared object or action is first introduced safely, at a distance, so to speak, and is gradually made more and more immediate.

For a specific example, consider a female client who has a cat phobia. Alone in a room with a cat she will become panic-stricken, and will attempt to hide or climb away from the animal. Since cats are so commonplace, the woman is frequently agitated.

At the outset, the therapist brings in a cat and places it in such a way and at such a distance that the client is just able to tolerate the animal's presence. Thus, he may bring in a cat on a leash. If even this upsets the client, he will place the animal, securely tied, in the next room with the door open, at a distance that the client can accept, although she may still feel a bit uncomfortable. In this specific circumstance she is taught relaxation methods, practicing these methods until she feels comfortable with the cat at this distance. At the following session the leashed animal may be brought a bit closer, again to the point where the client reports feeling uncomfortable. Again the relaxation methods are practiced. In this way, during a few weekly sessions, the feared object is brought closer and closer. The client gradually learns to relax in the object's presence. A colleague of mine once presented just such a case history where he concluded by having the client come before the audience. In her arms she was cradling and petting a cat!

### *Teaching the middle way between fear and anger*

The success with phobias led counselors to work with other fears. These were generally more common and milder than phobias. People frequently report feeling intimidated by ordinary aspects of the world. For example, a student is too nervous to talk to his professor, to discuss what he believes is an unfair grade; a fellow is unable to say "no" to people who are always making demands on his time; a man meekly but resentfully submits to unfair rules or decisions. These all represent instances of individuals afraid, literally, to stand up for their rights or to represent themselves.

About 30 years ago there arose a movement known as *Assertiveness Training* (AT; Lange and Jakubowski 1976; Rakos 1991). Initially, the purpose of AT was to help people overcome their fears in these intimidating situations. That purpose, however, was soon modified. Some people sought assistance in dealing with these challenges not because they were intimidated but because they became too angry. They reacted to frustrations with harshness, insults, and even threats. They felt that their temper was out of control. Just as the timid people were unhappy with their fear, so these intemperate people were unhappy with their anger.

Because there were these two types of clients, fearful and angry, the purpose of AT shifted. It now guided the client into patterns of behaving that we might call a middle way. Clients were trained to be in that cool, central locus, between the extremes of fear and anger, to proceed in a state of equanimity. They were taught to represent themselves, to deal with the perceived unfairness by speaking in an appropriate way to the offender.

Situations arise in which someone (the offender) is seen as unfair, or frustrating, or troublesome. Clients are taught to view these situations as problems to be solved. They are taught not to turn away from the problem out of timidity, but to engage it. Otherwise it will never be solved. The ideal solution is described as one in which the offender, without being threatened, insulted, or even scolded is persuaded to cooperate, to help in solving the problem. Ideally, the resolution of the problem is amicable. If a friend were the offender the ideal solution is such that you remain friends. Usually, the unfairness is corrected; sometimes the client becomes persuaded that the original decision is, indeed, fair.

Because frustrations and challenges are to be regarded as problems to be solved, clients are taught a variety of problem-solving skills. Central among these is the skill of speaking tactfully. The client is taught how to speak to the offending party so as to win his or her cooperation in solving the perceived problem. From a Buddhist viewpoint the client is taught Right Speech. This training analyzes Right Speech into a few components, each of which is spelled out for the client. These components are

1 Maintain good and comfortable eye contact. Use a conversational voice, neither too soft (timid) nor too loud (scolding, overbearing).
2 Use "I-talk." Rather than criticize the offender, describe how you feel about the situation. Instead of saying "You insulted me," or "You have some nerve

doing that," begin by saying "I have a problem with what happened," or "I'm upset," or "It doesn't strike me as fair." Present your point of view without explicit criticism or attack. Because the offender is not being criticized, he or she is less likely to become defensive, stubborn, or angry.

3 Be polite; avoid commands. A command ("Stop making so much noise!") is the language of a master to an underling. It shows no respect for the other party. It is likely to evoke not a spirit of cooperation, but of resentment.

4 Begin in a spirit of goodwill. Assume that the offender was not being malevolent or insensitive, but rather that a mistake may have been made or that there was a misunderstanding. The student mentioned earlier, who was afraid to face his professor, might begin, "Excuse me Professor, but I think that an error may have been made in my grade." (Notice the I-talk, the polite tentativeness, the suggestion of a mistake.)

5 If these negotiations fail and you feel that the problem persists then seek assistance. The most common usage of this procedure is in dealing with organizations. A clerk makes an unfair decision (e.g. refuses to accept the return of a defective product). The most persuasive, good-natured speech doesn't move her. The clerk is rigid and inflexible. The strategy for such a situation is to ask, politely, to speak to her supervisor. Describe the case to that more authoritative person. Frequently, this works. Also, having such a strategy helps keep down your sense of frustration and anger that the clerk's rigidity might evoke.

6 If all else fails, one must have techniques for adapting to the unfair decision. In particular, be realistic. AT methods are very effective but, occasionally, they do not work. Start the problem-solving activity with the knowledge that not every problem will be resolved. Give it, as we say, your best try, but recognize at the outset that sometimes it won't work. This attitude also, when the negotiations end fruitlessly, helps minimize the turmoil.

In AT three teaching methods are used to shift the clients from their initial fearful-or-angry mode of reacting to a more poised, problem-solving style. All three methods involve presenting examples. The therapist creates problem scenarios similar to those that the client has complained about. These scenes are then described to the client. Any of the following three methods might then be employed.

*Conventional teaching*: This is typically the first method used. The various problem-solving skills are presented with reading materials or in a lecture. These would include the components (described earlier) of Right Speech. This didactic material ends with some sample problems, for each of which the incorrect and correct approaches are described. Here is an example of this approach.

You are sitting in a non-smoking car in a train. A clear No Smoking sign is above the entrance to the car. A fellow comes in, sits down near you, and lights up a cigar. What are the various modes of response?

*Intimidated*: You glare at the fellow but say nothing; you try to pull away so that you are less bothered by the smoke.

*Angry*: You scold the fellow, including some well-chosen swear words: "What the [blankety-blank] is the matter with you? Can't you read? This is a non-smoking car."

*Assertive*: "Excuse me. You may not realize it, but this is a non-smoking car. There is the sign that indicates it."

*Modeling:* After the client has learned about the skills, the therapist and an assistant act out a few of these problem situations. The therapist, then, serves as a model for the correct behavior. The client can learn this new mode of behaving by observing it in action.

*Role playing:* Again, a few sample problem situations are to be acted out. With this method, however, the client takes the part of the offended party. He or she is to use the Right Speech components in these skits. The therapist provides instruction when the client veers off toward too much timidity or too much anger.

By practising with these three techniques, the clients gradually change their fearful or intemperate style of behaving to this new problem-solving orientation. New habits, which result in less suffering for both complainant and offender, are thus instilled.

### *Imagery practice*

In recent years therapists have assigned "homework" to clients. In these practices, the client sits alone focusing on some inner process while in a state of relaxation. This activity resembles a meditative practice where the meditation concerns inner purification.

The use of imagery is proving to be particularly useful in this regard. It has been known for some time that one can improve a skilled performance by practicing that performance in imagination. For example, one can improve one's ability in a sport (throwing a ball accurately, escaping from wrestling holds) just by sitting quietly and imagining the performance of these activities. This use of imagery to strengthen habits has come to be employed in psychotherapy. Arnold Lazarus (1984) has been very influential in this regard. He instructs his clients to practice using imagery under conditions of deep relaxation. Several times a week the clients, when alone, are to first sit and become deeply relaxed. In this condition, they are to vividly imagine scenes that are relevant to their particular source of suffering. For example, a woman becomes agitated and angry whenever her mother-in-law criticizes her. Her reaction of rage to her mother-in-law has created difficulties between the client and her husband. Nevertheless, the woman says that she is unable to control her angry reactions. The therapist views this situation as one that requires a change in this client's habits. She must change from a response of anger to one of imperturbability, equanimity. The client agrees but asserts that it is not possible. She reacts too quickly with anger. The therapist assigns homework. Several times a week, while sitting quietly and relaxed, she is to imagine her mother-in-law being offensive. While vividly imagining this, she is now to practice in imagination reacting not with anger but with indifference,

with better understanding of her mother-in-law's helplessness, or with a tactic of changing the subject or even leaving the room. In this way, new habits of patient behavior come gradually to replace the habit of simply reacting with anger.

Such imagery "meditations" have been used as supplements to systematic desensitization (the person, while alone and relaxed, vividly imagines encountering the feared situation and reacting to it in a calm manner) and for the control of strong cravings (a chronic overeater imagines eating his favorite foods and then becoming nauseous, or developing illnesses from being excessively overweight).

Albert Ellis, who, as we saw earlier, interprets the client's irrational beliefs as unfortunate habits of thought, also has clients engage in this kind of purifying practice. Clients are to visualize situations that they find "terrible," "awful" (i.e. situations about which they catastrophize). They are then to engage in what Ellis calls *disputation*. Suppose, for example, that a client refuses to undertake some important, desirable activity because, should he fail, his friends will laugh at him. This is a situation he simply cannot face; the very thought is "horrible." At home, at a quiet time, the client is to question that judgment. So what if they laugh? Why will that be so terrible? Who will be hurt by it? In addition to disputing his judgment the client makes use of imagery, seeing the friends jeering. Instead of being crushed (in this imaginative scenario) he joins in the fun, or just shrugs his shoulders, recognizing that nothing really terrible is happening.

The general rational for these imaginative practices is that, first, the pain experienced by the client is caused by certain habits, habits of thought as well as of action. Second, this homework helps the client replace these suffering-causing habits with new reactions and new behaviors that are considerably less pain producing. That is why I suggest that the clients are engaging in a kind of meditation oriented toward inner purification.

## Conclusion

These, then, are some of the techniques employed by psychotherapists to alleviate many afflictive states (e.g. fear, anger, frustration, disappointment). In some cases these techniques require the services of another person, the therapist, to produce the changes. Systematic desensitization is of this form. Here, the therapist is like a doctor who manipulates the patient to produce his or her well-being. In most cases, however, the interaction is more one of education. Clients learn to become more mindful, to dispute their own long-standing detrimental beliefs, to take a problem-solving stance rather than to react with agitation to life's challenges. As was remarked earlier, the therapist is rather like a guru who points the way toward inner transformation, the transformation that liberates the individual from much suffering, the transformation that wise people, both East and West, strive for.

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# EPILOGUE

## Where we are and where we are likely to go

*Christopher D. Tori and D. K. Nauriyal*

### Introduction

Hopefully, the present volume has stimulated new ideas regarding the interface between the scientific study of the mind and Buddhism. To encourage this end, we decided to conclude this work with the opinions of contributors on "where we are" and "where are we going" with respect to this junction. This seemed an important endeavor because science and institutionalized religions are based on divergent premises and attempts to establish convergence between them is often met with skepticism and apprehension. For example, religion promises absolute truth while science eagerly awaits new paradigms to explain the ever changing body of empirical knowledge. One may wonder, for example, if there is any common ground between the belief that all phenomena relating to the mind are rooted in matter and the view that reductionistic thinking of this sort lacks the conceptual tools to address human concerns about the purpose of life and the principles of ethical living. Part of Buddhism's enormous appeal, however, lies in its utilitarian origins, lack of dogmas, and primary interest in understanding the nature of mental events.

As the present volume demonstrates, it does seem possible that meaningful interdisciplinary exchanges can be established between those who advocate religious positions and empirical scholars under the broad umbrella of Buddhist studies.

The views of authors concerning the present and future states of the Buddhist – science discourse were also solicited to integrate the diverse views presented in the text and contributors were asked to consider potential problem areas that might arise as collaborative works between Buddhist and science scholars mature. This was done because critical views about religious issues are often difficult to articulate in the collectivist societies where Buddhism flourishes (Carr 2003; Reyonlds and Carbine 2000) and it was felt that the provision of a place for the expression of such ideas would be a healthy action. Additionally, the critical responses of authors were used to suggest courses of action having preventive implications.

# Where we are

## *Positive assessments*

### *Those primarily identified with contemporary scientific disciplines*

All of these authors (i.e. psychologists and cognitive researchers) spoke of the growing interest among themselves and their colleagues regarding Buddhist principles and practices over the last few decades. As one mental health service provider noted:

> A majority of Western psychotherapists are likely to find basic Buddhist teachings concerning the control of the mind as a way to reduce human suffering compatible with their professional training and therapeutic goals. Psychotherapists, like religious practitioners, are seeking to help people live full, actualized lives free from the misery that arises when desire and clinging become excessive (e.g. addictive behaviors). The Buddha's teachings provide vital insights into ways entrapping mental processes can be avoided or remedied.

From the "do no harm" mandate of medical ethics (Pence 1997) to the intrinsic compassionate living principles given in the Dharma, there can be little doubt regarding the humane outcomes of Buddhist informed psychotherapeutic applications. Recent empirical findings, for example, have shown that interventions based on Buddhist mindfulness principles significantly reduce the mental afflictions of those suffering from a variety of psychiatric disorders (e.g. Aronson 2004; Baer 2003).

This caring stance was echoed in an urgent concern of a university professor who pointed out that "we live in and ever more dangerous world" requiring "a new and vigorous science of mindfulness, acceptance, and values that will help us find much faster and more focused ways to accomplish spiritual and psychological progress." Given inherent human aggressive tendencies (Freud 1930/1961; Jung 1936/1959) and the manufacture of ever more deadly weapons of mass destruction, the need for social scientists, philosophers, and spiritual leaders to derive peaceful solutions to conflicts and reduce the fires of hatred and avarice is beyond question. This need is, of course, primordial and the Buddha himself assisted the people of his time to avoid collective aggression and violence. Perhaps, one of the greatest potentials of a Buddhist informed social sciences in contemporary society involves the replacement of instinctual belligerence and intolerance with feelings of compassion based on the principles of selflessness and non-attachment.

The influence of core doctrinal Buddhist tenets in scientific research was also acknowledged. This conclusion came from an accomplished investigator:

> The development of what is called the embodied cognition approach is highly significant. Varela was one of the first to develop this, now mainstream cognitive scientists such as Andrew Clark, George Lakoff,

> and Mark Johnson, and even the late neuroscientist Jeffrey Gray have all found themselves (sometimes rather bemused) ending up in a very Buddhist position. Dependent Origination is just scientific and philosophical good sense.

The fact that the Buddha of the Pāli suttas did not invoke unseen deities or supernatural powers to understand originative factors makes his sagacity concerning causality all the more appealing for contemporary scientists. A further contributing factor supporting the symbiosis of Buddhist and scientific thought is the Buddha's "charter of free inquiry" (i.e. the Kālāma Sutta) where he reminded listeners that, rather than requiring blind faith, his teachings should be subjected to pragmatic evaluation.

Fortunately, following the leadership of His Holiness the Dalai Lama, many contemporary Buddhist leaders have shown a willingness to demystifying their doctrinal canons through rigorous scientific scrutiny. As a consequence, interactions between the Buddhist and the scientific communities have been productive and are beginning to yield a good deal of interdisciplinary empirical work. From the Buddhist perspective, the objective of such research is to develop a critical perspective to evaluate the contemporary relevance of traditional Buddhist teachings. For their part, cognitive scientists and psychologists have been presented with new models of consciousness and mental transformation long pondered and practiced by Buddhist philosophers and teachers.

As shown in the following comment, the place of introspection as a way to comprehend cognitive functions is gaining new recognition in the scientific community.

> At the beginning of the 21st century, humanity is poised for a revolution in our understanding of consciousness, as the first-person modes of inquiry of the contemplative traditions of the world are integrated with the third-person methods of modern science. Furthering this interdisciplinary and cross-cultural investigation of the nature and potentials of consciousness and extending its benefits to the general public is an important goal.

It is worthy of note that, of all the matters constituting the domain of Buddhism, the benefits of various forms of meditation have been of primary interest to cognitive scientists and clinical professionals. A good deal of empirical outcome research concerning the efficacy of meditation has been undertaken and, for the most part, positive findings have been obtained for patients (Baer 2003) and normal populations (e.g. Emavardhana and Tori 1997; Gillani and Smith 2001). At the same time, the scientific exploration of the negative outcomes and abreactions of some meditators has yielded important cautionary information (e.g. Shapiro 1992) making it important for meditation teachers to receive

sufficient training to manage labile emotions that are likely to occur among some of their students.

### *The views of philosophers and Buddhist studies specialists*

These authors were generally supportive of the efforts of their scientific colleagues to empirically evaluate Buddhist canons. It was felt that "a number of possibilities for fruitful interactions between the scientific study of consciousness and Buddhist thought" were attainable.

There was widespread agreement that the Buddhism–science–philosophy dialogue had been significantly stimulated by the Mind–Life Conferences where "new ideas about the mind" have arisen based on Buddhist perspectives. One author even speculated that

> the growing knowledge of Buddhist thought by the Western civilization of our time may be comparable to what happened in Europe during the Renaissance. During this period, the rediscovery and translation of lost works of Aristotle, and later of other masterpieces of ancient Greek philosophy, triggered a deep transformation of the European view of the world that had tremendous consequences in philosophy, theology, art, and science.

This contributor, however, went on to warn that while Buddhist perspectives are more prominent in academic philosophy and the cognitive sciences than ever before, widespread acceptance, if it does come, will take time.

> This transformation took almost three centuries, and several waves of forward and backward surges to be completed. The increase in the speed of communication in our era is a favorable factor for a similar process to occur at a quicker pace, but this factor is probably not sufficient for significantly reducing the time-lag of assimilation. For here, what is at stake is not a superficial flow of information, but rather an inherently slow process of personal realization and cultural appropriation, which involves a "gestalt-switch" or a change in our "forms of life."

By implication, the introduction of Buddhist teachings to world audiences must be done with appropriate accuracy and cultural sensitivity.

### *Critical comments*

#### *Those not identified as professional psychologists or cognitive science researchers*

Keeping with authors from Buddhist studies and philosophical disciplines, critical comments concerning "where we are now" are presented. A good deal of concern

was expressed concerning problems associated with a superficial understanding of Buddhism by scientific researchers.

> In fact, it would seem that it is not uncommon for academic psychologists, who, when discussing aspects of different Buddhist traditions, practices, and principles (as they relate to issues in psychology), do so without knowledge or sensitivity to Buddhist studies methodologies. To be more specific, from my reading of many academic articles on the uses of Buddhist mindfulness techniques in applied, clinical psychology, I often find that many authors have done a very poor job in explaining the Buddhist doctrinal side of their research or of their opinions. Characteristically, they do not employ the accepted methodologies used in the academic discipline of Buddhist studies in their work.

We, too, are apprehensive about the possibility of Buddhism being reduced to a few selected slogans or a group of mental health enrichment practices. Clearly, care must be taken that the adaptation of Buddhist conceptions to ingrained Western scientific thought is done in a manner that does not dilute its initial aims. The Buddhist–science dialogue must encompass more than the peripheral aspects of the Dharma.

The discussion we had earlier, however, gives rise to a question of prime importance: what are the essential teachings of Buddhism freed from cultural influences? Perhaps, new adherents from non-Asian societies could offer some interesting perspectives on this issue. Hermeneutic specialists in Buddhist studies will, of course, have much to say in this regard. Thus, we recommend that open-minded discussions of defining Buddhist tenets be pursued in a multicultural and multidisciplinary context. As one author quipped, "Buddhism is too important to be left to the professional Buddhists." Perhaps, scientific methodologies can shed new light on the fundamental aspects of Buddhist teachings rather than merely confirming interpretations given in scriptural texts. Tori (2004) and Emavardhana and Tori (1997), for example, have shown that the phenomenological experience of self (i.e. self-esteem) is unaffected by philosophical notions of selflessness. These empirical findings may stimulate new insights into the nature of Buddhist non-self teachings.

We do recognize, however, that the interdisciplinary identification of core Buddhist teachings are likely to be difficult because of epistemological differences regarding the nature of proof in philosophical/religious discourse and empirical science (i.e. logical analysis versus the testing of falsifiable propositions). It is possible, further, that many Western scientists may find Buddhist concepts "an assortment of curiously different notions concerning cognitive states and almost never a set of assumptions that might actually engage or enrich ruling paradigms." The "insularity of some of the prominent figures in the Buddhism–science dialogue" is yet another obstacle to the creative exploration of essential Buddhist teachings.

To exemplify the earlier discussions, one would not be surprised if large numbers of Western trained scientists were to find Buddhist philosophical texts such as the Ahbidhamma quaint, but outdated and often shrouded in paradox and illogicality. At the same time, some Buddhist studies specialists cite these early philosophical documents in their writings and a good deal of their reasoning is based on appeals to the authority of such documents. In the scientific context, however, supposed pronouncements of the Buddha are not considered infallible and this is even more the case with respect to the writings of the early Buddhist philosophers (e.g. Nāgārjuna).

Our position on this matter is that the early Buddhist texts found outside the collections suttas should not be disregarded or ignored. To the contrary, we believe that a meaningful understanding of Buddhism requires familiarity with these works, for without adequate scholarship, a one-dimensional or even puerile comprehension of the Dharma is likely. Thus, we suggest that understandable (i.e. suitable for broad audiences) hermeneutic research (e.g. Conze 1967; Levine 2003) be encouraged and supported. For example, to what extent (if, at all) is the essence of Buddhist teachings about abstracted ontological matters (e.g. emptiness as the ultimate reality) or more mundane details such as the attire of monks and ways to perform devotional rituals?

A further complication in this regard is the diversity of doctrinal perspectives within Buddhism. The complex beliefs of the Mahāyāna school, for example, are not found in Theravadian teachings. Perhaps, initial scientific studies of Buddhism will be most successful if conducted within the relatively straightforward Theravada metaphysical frame. Regardless of what specific aspect of Buddhism is being explored, interdisciplinary exchanges could founder if discourse is not explicit regarding the specific Buddhist tradition that frames the conversation; it is understandable why the conflation of the tenets of the various Buddhist traditions is generally not accepted by Buddhist studies methodology.

Another concern expressed was the primacy of reductionistic explanations in empirical science: "The view that consciousness is purely a product of reducible to states of the brain would be incompatible with traditional Buddhist philosophy, though perhaps not with Buddhist practice." While this concern is important, we nevertheless, suggest that the place of contemporary mechanistic, materialistic thought be given fresh consideration by Buddhist scholars as new insights are obtained in areas such as neurology and psychiatry (e.g. the physical causes of mental illnesses, psychopharmacological breakthroughs) and the cognitive sciences (e.g. understanding sensation and perception at the cellular level, brain mapping of behaviors, emotions, and thoughts). Surely, the Dharma will not stand at odds with valid findings of present-day physicians and research scientists even if they are expressed in positivistic language. Middle way thinking about this issue may, in fact, be a viable approach to unifying the mind–body duality: "The mental and the physical should not be seen as two facets of some third reality, but as two ways of ordering and selecting aspects of a single flux of lived experience."

## Authors from scientific disciplines

The scientists were particularly apprehensive about the dogmatism that seems an inherent aspect of most institutionalized religions. After all, ecclesiastic and lay apologists must offer "correct" answers (i.e. unconditional truths) to pressing human problems if their faith remains viable. In contrast, science thrives on questioning and offers no absolutes (Shadish *et al.* 2002: ch. 14). As Michael Faraday (1791–1867), the great chemist, stated

> The scientist should be a person willing to listen to every suggestion, but determined to judge for himself. The scientist should not be biased by appearances, have no favorite hypothesis, be of no school, and, in doctrine, have no master. The scientist should not be a respecter of persons, but of facts. Truth should be his primary object.

The words of Max Born (1882–1970) are also relevant in this regard: "My advice to those who wish to learn the art of scientific prophecy is not to rely on abstract reason, but to decipher the secret language of Nature from Nature's documents, the facts of experience."

The following from a Tibetan Buddhist was cited to exemplify the fundamental differences between scientific thinking and religious conviction.

> In the natural sciences, successive revolutions have shown that we can never be sure about being "definitely right." So dare I say that inner enlightenment provides a different sort of certitude about the ultimate nature of the mind, the mechanisms of happiness and suffering, and the reality of phenomena? This certitude comes from an inner discovery that is confirmed at each moment of our existence. It appears as an immutable understanding of the true nature of things, and manifests itself in the human qualities that we all want to have.

In view of these sentiments, the following was posed: "When one party in a dialogue claims to have 'an immutable understanding of the true nature of things', including the 'ultimate nature of the mind,' is genuine dialogue possible?" Another author's summary of this problem was as follows:

> What are the obstacles to deeper forms of collaboration? Although they are certainly manifold, they could be summed up in a word: religion. The religious impulse . . . is the tendency to seek and defend an explicit or implicit view of the world that makes one's life and one's action meaningful and significant. This is the impetus for and the barrier to deeper dialogue between Buddhists and scientists. It is an impetus to collaboration

> insofar as both traditions seek to understand reality more deeply, but a barrier insofar as the world views and methods they defend are so different . . . How, after all, would scientists go about proving or disproving rebirth or liberation? What would even count as criteria? Scientists cannot even explain artistic meaning let alone religious truth.

This again kindles the central question of whether or not there are articles of faith in Buddhism. If so, what are they and who establishes orthodoxy? For example, some Western Buddhists view the concepts of reincarnation, nirvana, and karma as merely culturally rooted allegories that were used to help people steeped in a Hindu milieu consider new ways of thinking and acting. Would some form of "excommunication" from established Buddhist communities occur if such opinions are held? If so, why, given that differences in highly speculative metaphysical matters have little to do with the everyday living of an ethical and compassionate life. The fact that the Buddha's teachings were not committed to writing until several generations after his passing seems to have avoided the inhibiting of later Buddhist monks from understanding the Dharma with an ever growing discernment.

Also noted was the hesitancy of specialists to openly critique Buddhist tenets in the same rigorous manner that has been done for contemporary models of human behavior (e.g. Freud or Skinner). Stephen Batchelor (1997), for example, presented his criticisms of several faith-based Buddhist beliefs in a reserved and approving manner. Views of Buddhism that are highly critical do not seem to occupy a prominent position in the Buddhist literature. For example, John Horgan's internet essay entitled "Why I Can't Embrace Buddhism," noting problems such as Buddhism's denial of the finality of death (e.g. mechanisms of judgment and retribution after death), claims to absolute truths, anthropomorphic cosmology, difficulties associated with the detached celibate ideal, and a male-dominated monastic community may be worthy of serious discussion by those committed to Buddhist scholarship. In fact, the expression of dissenting ideas should not be suppressed or labeled as heretical. Rather, like all things that rise and fall, dissenting perspectives should be noted, considered, and, whenever possible, potential benefits should be garnered.

## Where we are going

There was unanimous agreement that interdisciplinary dialogue should continue. For organizational purposes, the opinions of contributors to this volume are summarized by speciality areas. It should be noted, however, that this division is merely a literary convention and care should be taken not to create, or reinforce an unwanted "us and them" attitude. We hope that the sense of camaraderie and kinship among Buddhist scholars of all sorts will continue to grow regardless of fortuitous differences in professional affiliation or personal factors.

### *The comments/suggestions of the professional scientists*

The following observations captured the thinking of several authors from the scientific disciplines:

The future synergy between Buddhism and Western psychology depends, we think, upon three developments.

1 Meditation and mindfulness practice are new methods in psychotherapy. We need a track record of convincing demonstrations, to prove that these methods are, indeed, effective in helping clients.
2 A good deal depends upon how the Buddhist conception of suffering is represented. If Buddhists characterize liberation from suffering as becoming freed from the wheel of saṃsāra, this characterization will have no meaning to psychotherapists, since rebirth is not part of the Western cosmology. If, on the other hand, Buddhism considers liberation from suffering as a release from mental afflictions that we frequently experience and that continually threaten us, then Buddhism and psychotherapy will serve each other well.
3 The most severe problem is the issue of *śūnyatā* (emptiness, no-self). Much of Mahāyāna literature presents this as the essential reality, and its realization as the essential basis for enlightenment. Therapists of almost all schools, however (behavior therapists are the chief exception), view their task as helping the client realize his or her deepest self and to strengthen that self relative to other mental processes. Such strengthening is considered the best way to reduce mental afflictions. I believe that until this difference in the view of the self is resolved, psychotherapists will have trouble accepting Buddhism beyond the techniques that it has to offer.

While, the first issue raised is currently being addressed in the experimental literature, the latter philosophical issues will require thoughtful and tolerant sharing among scholars of differing perspectives.

This functional suggestion to maintain and strengthen the Buddhist–science dialogue was given in spite of underlying epistemological and ontological differences.

We think Buddhism–science dialogues should focus on practical matters and avoid the clash of commitments regarding the basic and potentially conflicting claims of truth and authority and the means to attain valid knowledge. Focus should be placed on small incremental steps. As with any inter-religious dialogue, most of us are modestly seeking overlapping areas instead of identical aims; common ground rather than joint ideology. Admittedly, this self-limitation sidesteps some of the most crucial issues such as the reciprocity of theory and data and simultaneously disappoints some of our strongest desires for, say, a singular, explicit, and all-encompassing worldview. But, we think, moving in small steps is most appropriate, given our pluralistic age and the open-ended nature of post-modernity. We see no need for scientists to rush to validate Buddhist doctrines,

nor for Buddhists to eagerly embrace scientific authority. We can just take it one step at a time and see where it goes.

This course of action does seem wise, offering many advantages (e.g. the present text is one small step in the search for common ground). However, we believe that cross-disciplinary exchanges concerning the philosophical differences that separate scientific and religious undertakings should not be discouraged. Rather than specialists communicating with each other in their technical languages (i.e. jargon), we hope that papers and presentations concerning the issues that divide scientists, philosophers, and religious leaders will now increase in frequency. For example, is the Aristotelian logic (Dauer 1989) that underlies scientific inquiry (e.g. the principles of identity and contradiction) fundamentally incompatible with Nāgārjuna's four-cornered tetralemma (everything is real, not real; both real and not real; neither real nor not real; this is the Lord Buddha's teaching)? Although challenging, frank conversations between scientists and Buddhist scholars of all sorts on "difficult issues" may perhaps yield more productive outcomes than unidisciplinary exchanges among likeminded individuals regarding topics of common interest. Of course, all debates should be carried out in a manner compatible with "middle way" principles.

Conversely, it is also possible that the assumptions, methods, and goals of science and religion are diametrically opposed. Venerable Master Hsuan Hua, for example, warmed that "Within the limited world of the relative, that is where science is. It is not an absolute Dharma. Science cannot bring true and ultimate happiness to people, neither spiritually nor materially" (cited in Verhoeven 2001: 88). This perspective was echoed in the following comment:

> The voice of those who warn that science and religion should remain separate should also be heard. As many have concluded, religion offers meaning and moral principles, something contemporary science cannot yet give. Historically, the mixing of religion and science has been problematic (e.g. Galileo). Thus, those who would make clear distinctions between scientific and religious thought should be given an adequate opportunity to express this view.

It is recommended that the exploration of possible orthogonal facets of scientific and Buddhist domains be supported. However, recognition of the factors that distinguish religious and scientific undertakings need not imply that collaboration is not possible. To the contrary, the identification of defining differences regarding the nature of being and ways of knowing also yields greater clarity regarding common ground, thereby singling out those areas where joint endeavors are most likely to succeed.

Before closing this section, there is one additional suggestion we would like to offer. Perhaps, the most important cooperative endeavor of Buddhist–science studies would be the identification and documentation of anomalous events. If this is carefully done, it is possible that new paradigms of inquiry could emerge (Kuhn 1970). Care must be taken, however, to avoid the embellishment of pious stories; rather, unusual events and the behavior of extraordinary persons should

be carefully recorded with an emphasis on the collection of empirical information. As a body of exceptional findings accumulates, scholars from diverse disciplines could search for new ways to understand "the world as it really is" which is, of course, one of the major goals of Buddhism.

### *The opinions/suggestions of the philosophers and Buddhist studies specialists*

The fear that classical works in philosophy would be considered irrelevant by contemporary scientists was voiced.

> Psychology and cognitive science conceive of themselves as experimental and empirical. Thus, it is not surprising that these researchers pay little or no attention to work they see as "purely philosophical," particularly, if it is also old, or even worse, if it is ancient.

Such an attitude would, without doubt, result in a very shallow appreciation of the more profound meanings of Buddhist teachings and care must be taken to adequately explain the Buddhist doctrinal aspects of scientific investigations. Thus, it is recommended that psychologists and cognitive scientists expand their study of Buddhist philosophy. As Trierweiler and Stricker (1998) lamented in their textbook concerning the education of psychologists, philosophical considerations are now deemphasized as the "technocratization" of the profession grows. Technicians, however, lack the broad perspectives required to undertake well-founded research concerning the human conditions of interest to Buddhist scholars.

This was suggested as one way to sustain meaningful (i.e. valid) interdisciplinary research.

> For the short run, applied psychological researchers need to work with those who have been trained to read the ancient suttas and sutras; this is so, even if these works have been translated into a modern language; understanding the classic texts is not comparable to the linear progression of the typical psychology textbook. The appreciation of the impact of the ancient textual redactions requires specific reading techniques. For example, how does one go about correctly comprehending the teaching of Dependent Origination as it appears in the Pāli suttas? When read through the lens of Buddhist studies methodology, one begins to see just how scientific the Buddha of the Pāli suttas was.

While few would disagree with the proposition that scientific researchers and philosophers should become better informed about Buddhist hermeneutical methods and outcomes, actually accomplishing this task would be quite formidable for the average investigator making the need for cross-discipline collaboration all the more imperative. Time and energy must be devoted to finding and maintaining symbiotic

relationships with those who supplement one's expertise, and more Buddhist studies articles authored by scholars from diverse specializations should be encouraged.

One unexpected prediction was that Buddhist scholarship will not remain highly involved in collective and social projects because "these sociological approaches often result in a demeaning of Buddhist traditions."

> In the end, I see Buddhist studies by Buddhists as that which will prevail. Buddhism is not a conventional religion nor is it powerfully concerned with philology. Sociology is derived from more socially oriented religious traditions (e.g. Christianity and Judaism). Buddhism has far more to say to philosophy and psychology than the prior two forms of study. Its influence in modern brain study and psychology has become noteworthy.

Many, of course, will disagree with this view (particularly Mahāyāna Buddhists) and much has been written on the virtues of socially involved Buddhism (e.g. Eppsteiner 1988; Moon 2004; Queen *et al.* 2004). At the same time, however, it is interesting to note that religious metaphors such as "the chosen people" or "the mystical body" are not descriptive of the Buddhist ideals of awakening, detachment, and equanimity. Major Buddhist sects, additionally, do not seek converts in the same manner as the world's major theistic faiths (e.g. when inquiring about "becoming a Buddhist" the first author was reminded by a monk in Thailand that "there was nothing to become").

Finally, the influence of the internet on the future direction of Buddhist studies of all sorts was foreseen, "It may be that the future of Buddhist studies will be found to reside in the internet more than anywhere else." In the free wheeling, multicultured internet environment, it will be interesting to observe which Buddhist views attract worldwide interest, not only of scholars, but also among people in general. The empirical identification of the catholic versus parochial aspects of Buddhism will be an intriguing development hastened by the explosion of new electronic technologies.

## Summary and conclusions

The authors who contributed to the present volume were asked to reflect upon two issues: (a) the current state of the Buddhist–science encounter and (b) what future developments might be expected. In addition to positive evaluations, possible hindrances to continued collaborative endeavors were sought in the hope that constructive criticisms would lead to potentially useful preventive actions.

All the authors spoke of the growing interest in their respective disciplines concerning Buddhist ideas and practices. Psychotherapy appears to have been the field most influenced by Buddhism with large number of clinicians successfully using mindfulness (and other introspective) methods to assist clients reduce mental suffering and achieve more actualized living. Mental health practitioners also recognized the importance of equanimity and self-control in combating conduct

disorders (e.g. addiction and excessive aggressive). Finding ways to expand these values in world populations was seen as an imperative and it was also hoped that an emerging Buddhist informed psychology would yield new avenues of thought.

In view of psychology's long struggle to distinguish itself from philosophy and religion (Boring 1950), it was not surprising to find apprehension in this group concerning what were conceived as inevitable religion–science conflicts over dogma and appeals to authority. While religious teachers have to present correct *answers* to existential questions (e.g. life after death, contented living, the nature of the cosmos), the social sciences offer no absolute truths, only ever more questions with the belief that current paradigms (i.e. world views) will, sooner or later, be swept away by newer conceptions.

Ways to overcome philosophical differences of scientists, Buddhist scholars, and monastics were offered. One recommended strategy involved the slow and methodical empirical examination of Buddhist tenets one-by-one. From this perspective, it is important not to be overly ambitious in terms of seeking scientific explanations for profound ideas. With time and patience, it may be possible to identify those religious canons that are (and are not) within the purview of scientific inquiry. It was pointed out that Buddhist psychology is not therapeutic in the same manner as contemporary intervention models (e.g. Freud, Rogers, cognitive–behavioral therapy). In fact, the approach towards understanding the mind found in the Abhidhamma and Yogācāra are much closer to experimental cognitive science than with the practice of psychotherapy. Most importantly, Buddhist psychology has no theory of pathology per se, and does not primarily concern itself with moving the person from dysfunctional to a normal functioning within particular social contexts.

In conclusion, while many problem areas exist, the future of interdisciplinary collaborative endeavors among Buddhist studies specialists, monastics, lay practitioners, philosophers, and empirical scientists nevertheless remains very promising. The juxtaposition of ontological and epistemological differences may well stimulate the development of new methods of inquiry (e.g. a merging of first and third party observations) and the careful recording of anomalous events could result in paradigmatic transformation. The empirical validation of specific Buddhist techniques in psychotherapy and everyday life settings (e.g. mindfulness meditation) has stimulated more interest in the study of the Dharma among social scientists worldwide. There seems to be good will and a desire to engage in multicultural, multidisciplinary research on many fronts. The present book is one small step in that direction and we hope that many other expressions of the emergent symbiosis of Buddhist and scientific thought will soon follow.

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# NAME INDEX

# SUBJECT INDEX